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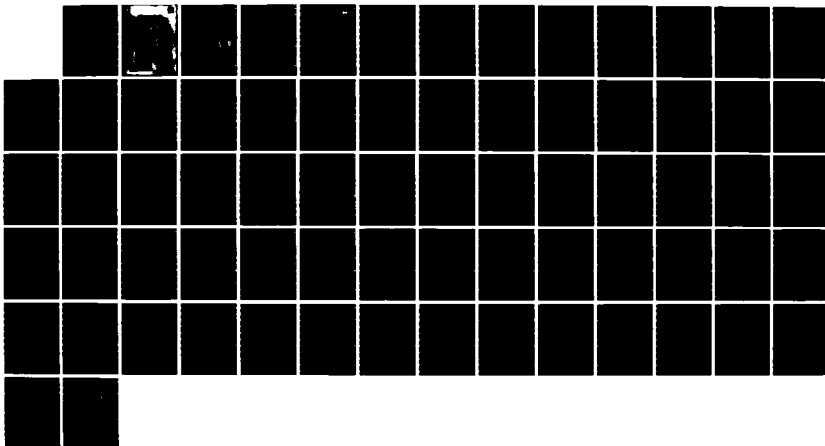
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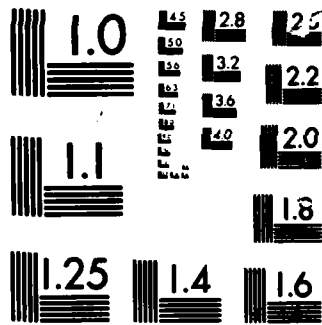
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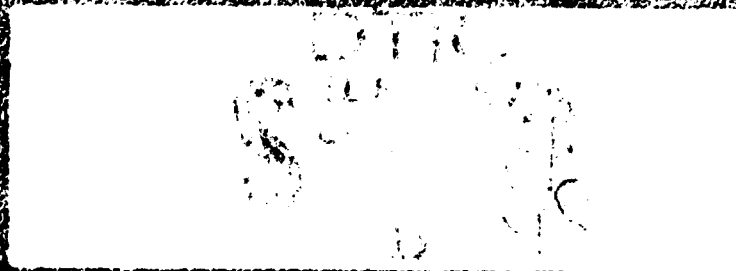
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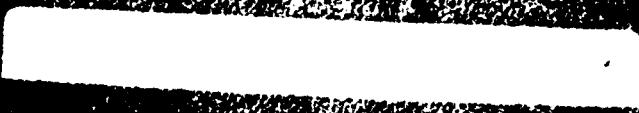
FORT DRUM PRELIMINARY FISCAL
IMPACT ANALYSIS

LOGISTICS MANAGEMENT INSTITUTE



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**FORT DRUM PRELIMINARY FISCAL
IMPACT ANALYSIS**

January 1986

**William B. Moore
David D. Metcalf**

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FORT DRUM PRELIMINARY FISCAL IMPACT ANALYSIS

Fort Drum is a U.S. Army base in northern New York State that has served primarily as a National Guard and Reserve support facility since the end of World War II. Recently, the Army decided to activate the 10th Mountain Division and station it at Fort Drum. The expansion of Fort Drum between now and 1990 will bring 9,400 new military and 900 new Federal civilian personnel along with their dependents to a tri-county area surrounding the base. The total population is expected to increase by 29,000.

The large population influx will have a significant political, economic, and financial impact on the local area. To describe that impact, ^{to allow} we have prepared a Preliminary Fiscal Impact Analysis (PFIA) – an instrument that the local managers can use so that financial benefits are maximized and adverse impacts are minimized. The PFIA is the first step in a two-step process to inform a community of the effects of a major economic change on public services and capital facilities. The PFIA provides a time-phased assessment of the impacts and the corresponding public financial requirements. It is strongly influenced by data and direction provided by local and state budget officials. The second step – the Fiscal Impact Analysis (FIA) – follows the PFIA and is an update or refinement of the PFIA that is done as more information about the impacts becomes known.

This PFIA consists of a summary volume that provides information on all aspects of the Fort Drum expansion to government officials and the general public and technical appendices that provide greater detail on the specifics of the expansion. Descriptions of the methodology are intentionally brief in the PFIA since more detailed descriptions are given in the appendices. Questions that go beyond the

coverage of the technical appendices should be addressed to the Executive Director of the Fort Drum Steering Council (FDSC).

The PFIA is divided into seven chapters. Chapter 1 is an economic overview of the Fort Drum expansion and its effect on the surrounding tri-county area consisting of Jefferson, Lewis, and St. Lawrence Counties. The current Army expansion schedule of 9,400 new military will create over 6,300 new jobs between 1985 and 1990 in the impact area, and many of those jobs will be claimed by existing residents of the area. Annual personal income in the area is expected to increase by \$287 million.

**SUMMARY OF PRELIMINARY POPULATION
AND EMPLOYMENT GROWTH**

(\$'s are Expressed in Millions of Constant 1985 Dollars)

	1985 BASELINE	1985 - 1990 FT. DRUM CHANGE	AVERAGE ANNUAL CHANGE
Impact Area			
Total Population	136,891	28,712	4.2%
Civilian Jobs	51,200	6,325	2.5%
Total Salaries	\$972.8	\$287.0	5.9%
Total Students	24,951	5,039	4.0%

The increase in salaries combined with a \$1 billion construction program and an estimated \$24 million in additional local Army procurements will be an enormous positive economic stimulus to the area. The expansion will generate tangible private sector economic benefits: More jobs and increased income to current residents and an increase in both existing business volume and new ventures. The new ventures will include both commercial enterprises as well as residential housing developments.

Similarly, the Fort Drum expansion will generate tangible public sector benefits. Two of the major benefits will be new tax revenues and additional bonding capacity. Those benefits are accompanied by requirements for additional public services and new infrastructure in certain cases.

Chapters 2 and 3 of this report discuss the "whys" and "hows" of fiscal impact analysis. The Office of Economic Adjustment (OEA) in the Department of Defense is required to perform an FIA to advise the Secretary of Defense whether a military base expansion will cause unfair and excessive fiscal burdens on local communities. It is preceded by a PFIA, which takes into account current known information and assumptions concerning:

- On and off base construction activity
- Permanent military and federal civilian job increases
- Indirect "spinoff" jobs created off base
- Local labor conditions
- The likely distribution of inmigrants
- Fiscal histories, projections, and impacts for counties, cities, towns, villages, school districts, and the state.

The results of this PFIA for Fort Drum have been formulated so they can be readily evaluated and monitored. The information it provides will then be updated, expanded, and enhanced by the FDSC with technical assistance from OEA.

Chapters 4 through 7 present and discuss the results of the PFIA for the Fort Drum expansion. Some key results of the analysis are:

- The expansion is expected to generate positive cash flows to local jurisdictions by 1990, with negative cash flows in the 1986 to 1988 time frame.
- Revenues, expenditures, and capital budgets will each increase by an average of 15 to 20 percent of the historical levels.

SUMMARY OF PRELIMINARY FISCAL IMPACTS

(\$'s are Expressed in Millions of Constant 1985 Dollars)

	1985 BASELINE	1985 - 1990 FORT DRUM CHANGE	AVERAGE ANNUAL CHANGE
Tri-county			
Revenues	\$132.7	\$14.6	2.2%
Expenditures	\$126.9	\$13.6	2.1%
Capital Budget	\$6.8	\$4.6	13.5%
Cities, Towns and Villages			
Revenues	\$54.1	\$10.9	4.0%
Expenditures	\$42.5	\$7.8	3.7%
Capital Budget	\$20.9	\$0.7	0.7%
School Districts			
Revenues	\$49.3	\$14.2	5.8%
Expenditures	\$48.5	\$14.5	6.0%
Capital Budget	\$1.0	\$9.7	194.0%
New York State			
Revenues	\$21,056	\$16.4	0.08%
Expenditures	\$20,881	\$15.3	0.07%
Capital Budget	N/A	\$7.9	N/A

- Capital expenditures needed to support the population influx are estimated to be:
 - \$4.6 million for county governments for requirements associated with general government, fire, police, etc.
 - \$700,000 for city, town, and village requirements associated with general government, fire, police, etc.
 - \$9.7 million for school districts. We anticipate, however, that New York State will contribute its historic share of 80 percent of these costs leaving the school districts with a \$1.9 million funding requirement.

Many of the problems associated with the rapid growth of military bases will not be experienced in the tri-county area. Unlike Fort Stewart and Kings Bay, Georgia, where the population of a remote and unpopulated area doubled or tripled, the Fort Drum expansion is estimated to increase the affected population by 21 percent in a more economically diversified and populous area. Potential problems

are further mitigated by sound financial management in local governments and excess facilities, particularly schools in some communities. The Development Authority of the North Country (DANC) will further relieve fiscal pressures on local government budgets by pooling Army and area-wide demands for services and meeting many of these demands with infrastructure financed through user fees.

The expansion of Fort Drum will result in many changes in the tri-county area. Some of these changes will create short-term problems for local jurisdictions, while others will provide positive benefits. In both cases it is essential that managers at all levels of government and in the school districts plan to manage growth. Only by such planning can the negative impacts be minimized and the positive benefits amplified. With a well-considered and executed growth management plan, the region surrounding Fort Drum can look forward to a period of economic growth that should generate significant benefits.

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1. THE FORT DRUM EXPANSION

Fort Drum is a U.S. Army base located in northern New York State bordering Jefferson, Lewis, and St. Lawrence Counties. It was primarily an Army Reserve and National Guard post with a permanent 2,000-person work force, half of whom are military personnel.

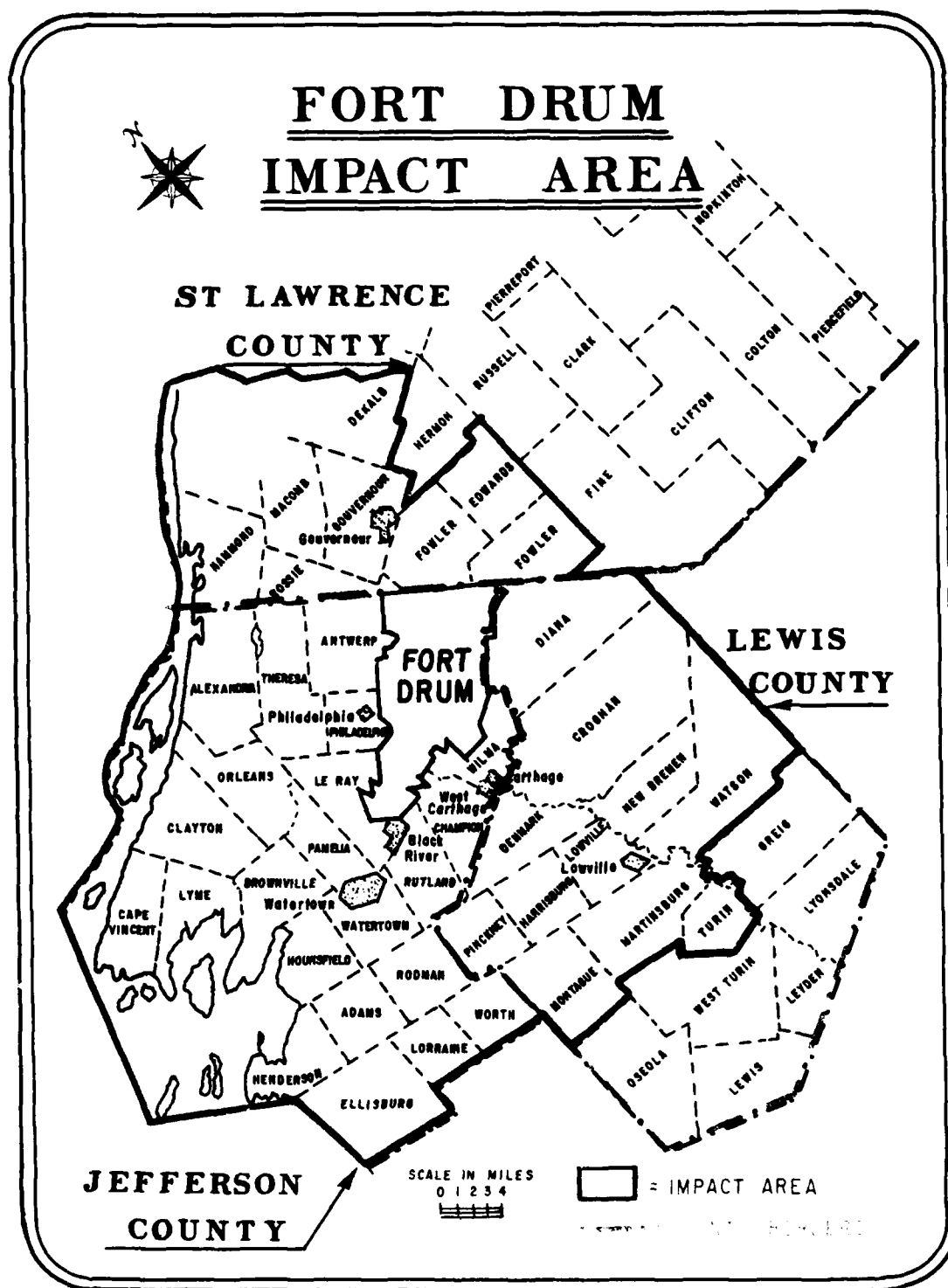
The Army has recently decided to activate the 10th Mountain Division and station it at Fort Drum. With that activation, the base population will increase by 9,400 military personnel, the Federal civilian work force will increase by 900, a peak of 2,600 construction workers will be employed, and more than 14,000 military dependents will move to the area. Those changes will have a significant economic impact on the tri-county area, the greater northern New York area and the state, and will require detailed growth management planning for all jurisdictions affected: counties, cities, towns, villages, school districts, and the state.

The preliminary fiscal impact analysis presented here is an instrument that can assist the communities in managing that growth and minimizing any adverse impacts it might have.

FORT DRUM AND THE TRI-COUNTY AREA

Figure 1-1 is a map showing the relationship of Fort Drum to the surrounding counties, towns, villages, and cities that will be impacted by the change in its size. The shaded portion indicates those areas that are expected to be significantly affected or impacted. The tri-county area surrounding Fort Drum had a combined 1980 census population of 227,440, which, except for some intraregional shifts, has remained stable over the past 10 years. The primary impact area has a population of 136,891. Watertown, with a population in excess of 27,000, is the largest city within a 50-mile radius of Fort Drum. The regional population increases significantly

FIGURE 1-1. FORT DRUM IMPACT AREA



during the summer months because of the popular recreation opportunities there. That seasonal fluctuation accounts for 10 to 18 percent of all housing in the area. Demographic trends show that the overall population in the region is aging and that the population, without Fort Drum expansion, is expected to increase by less than 1 percent a year through 1990.

The major economic activities in the tri-county area are government, manufacturing, service industries, and agriculture. Although farming in the region has declined slightly in recent years, the region remains basically an agriculture-based economy, with as much as 40 percent of the land area devoted to agriculture. Aside from the summer months, unemployment is generally high – normally in the 10-to-12-percent range – throughout the tri-county area. That persistently high unemployment rate reflects the fact that some area industries have closed down and have not been replaced by new industries. The current economic trend could be best described as moderately declining with few prospects for new jobs in the foreseeable future.

The following sections briefly describe Fort Drum as it now exists (referred to as the Fort Drum baseline) and as it will exist with the activation of the 10th Mountain Division (referred to as the Project).

FORT DRUM BASELINE

Fort Drum, established in 1908 as Pine Camp on 10,000 acres, was one of the Army's first field training projects utilized by both Regular Army and National Guard troops. In 1939, the Federal Government purchased an additional 90,000 acres and turned Pine Camp into a major training facility for World War II troops. After the war, Pine Camp reverted to a training facility for Reserve and National Guard units. Renamed Fort Drum, it currently occupies 107,265 acres in Jefferson and Lewis Counties.

Before activation of the 10th Mountain Division, the Fort Drum work force consisted of fewer than 2,000 persons, with approximately 1,000 being active duty military personnel. In addition, the 350 units of family housing on Fort Drum are normally fully occupied. The total permanent post population – work force and dependents – is seldom in excess of 3,000. In addition to the permanent population, however, Reserve and National Guard training creates temporary population surges in the summer. The Reserve and National Guard temporary population peaks at 10,000 during the summer and is substantially less in the winter.

Most Fort Drum facilities are World War II-era structures although some new "permanent" facilities were constructed more recently to support active duty units assigned to Fort Drum. These "temporary" facilities are maintained at differing levels.

FORT DRUM WITH THE PROJECT

With the activation of the 10th Mountain Division, the mission of Fort Drum has changed dramatically. This alteration of its mission means that Fort Drum will experience major changes in a number of critical areas.

The military population of the base will increase by 9,400, the Federal civilian work force will increase by more than 900, and an additional 14,000 military dependents will be brought to the tri-county area. A dramatic increase in the number of on-post facilities will be needed to support the population influx. Approximately \$1 billion worth of new facilities are either being planned or considered. These new facilities will include family housing, troop barracks, training facilities, service facilities, and industrial facilities. The amount of off-base purchases will increase substantially as a result of new support requirements. The base will become the major employer in the tri-county area as well as a major purchaser of goods and services. Fort Drum will become a dominant economic force in the region.

2. FISCAL IMPACT ANALYSIS FOR GROWTH MANAGEMENT PLANNING

The expansion of a military facility can provide significant long-term benefits to the areas surrounding the base as well as some short-term costs. Among the more tangible benefits are increased growth in business activities, addition of jobs to the local economy, and an increase in tax revenues. These benefits are often accompanied, however, with a requirement for additional services and infrastructure. New roads and additional water and sewer capacity are just two of the infrastructure requirements that are often needed. Schools will require additional staff and some will need new facilities. Additionally, Government-provided services may require new facilities and/or staff to meet the new demands that will be placed upon them. Identifying these requirements and developing a plan to deal with them is an essential part of managing growth.

FISCAL IMPACT ANALYSIS OBJECTIVES

If local communities are to deal with the short-term demands of rapid expansion, they must know the magnitude and timing of the expected impacts on infrastructure and services. This time-phased analysis of the impacts associated with a rapid base expansion and their corresponding financial requirements is referred to as a fiscal impact analysis (FIA).

Fiscal impact analyses of base expansions are not new; they can be traced back to the early 1940's, when the Lanham Acts (Public Laws 76-849 and 77-137) were legislated to provide assistance to communities that were impacted by rapid military base expansions during World War II. In the years following the enactment of the Lanham Acts, Congress has frequently passed legislation dealing with the effects of rapid military base expansions. A good history and explanation of these actions is

provided in a pamphlet published by the President's Economic Adjustment Committee (EAC) entitled "DoD-Local-State Management of Defense Related Growth: An Overview."

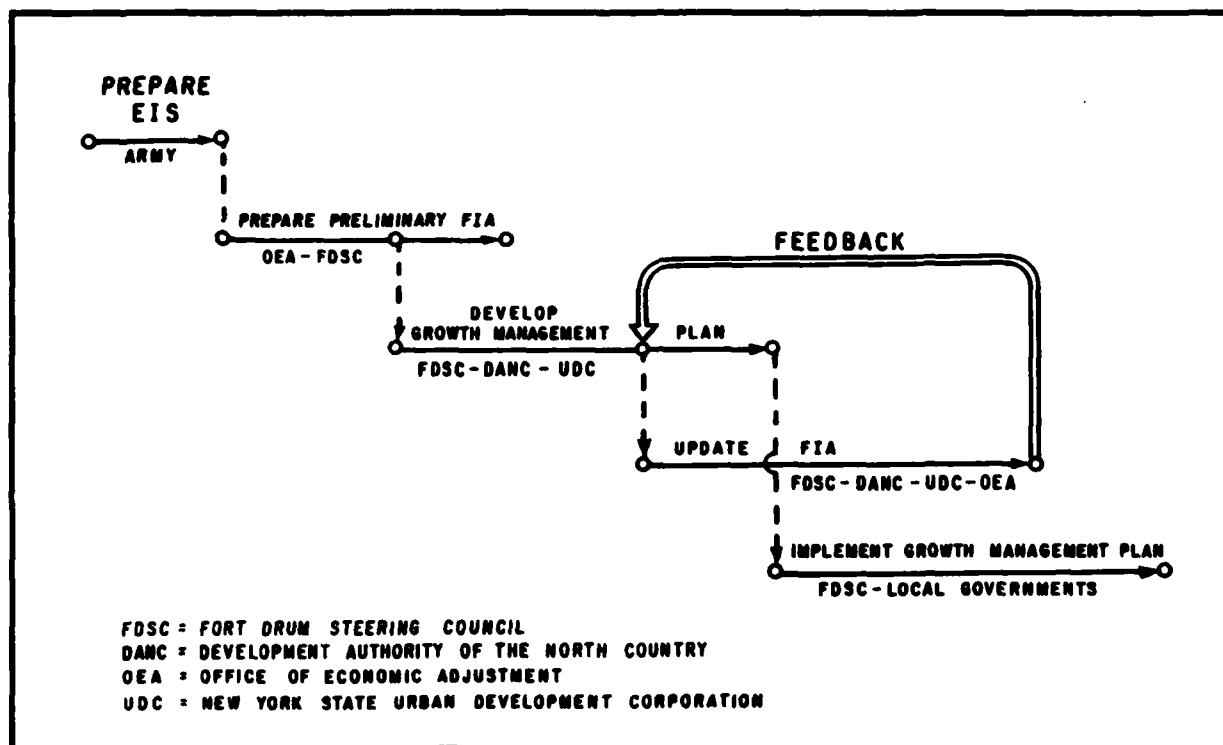
Current Federal Executive guidance (as stated in the Final Report on Community Impact Assistance submitted in accordance with Section 803 of the FY81 Military Construction Authorization) requires the Office of Economic Adjustment (OEA) to perform an FIA for communities that will be impacted by rapid military base expansions. The objective of these analyses is to identify the impacts caused by the military base expansion and to assess the communities' capabilities for avoiding unfair and excessive fiscal burdens. An equally important objective of the FIA is to provide a vehicle that local communities can use to monitor and manage growth. The FIA is a critical part of the local communities' efforts in planning to manage growth (see Figure 2-1).

THE ROLE OF LOCAL COMMUNITIES AND THE STATE

Ultimately, the local communities are responsible for managing growth within their jurisdictions. Federal and state agencies may offer assistance, but in the end the communities themselves must take the actions and must live with their consequences. For that reason, local jurisdictions must be involved in every phase of growth management. They have a vested interest in ensuring that any analyses take into account local issues and that proposed solutions to growth problems are feasible.

The process leading to the development of a growth management plan and its implementation is shown in Figure 2-1. After the initial Environmental Impact Statement (EIS), a preliminary FIA (PFIA) is prepared as the first step in the process, and the first activity in the PFIA process is the establishment of a local organization with task forces to lead and coordinate local planning. For the Fort Drum expansion, the Fort Drum Steering Council (FDSC) has been established to

FIGURE 2-1. GROWTH MANAGEMENT PROCESS



fulfill this requirement for the tri-county area. The Steering Council is supported by a number of task forces that have been set up to deal with specific issues.

The use of task forces permits local experts to become involved in the planning process and ensures that local issues are considered. Task forces also provide a vehicle for individuals outside the local government to become involved in growth management planning. The two task forces most involved with the Fort Drum PFIA were the Modeling Task Force and the Land Use Task Force, both of which were an integral part of the analysis effort. They provided insights into data availability and, in many cases, collected the data. They also provided the fiscal analysts with invaluable insights into the workings and requirements of the tri-county area and offered a sounding board for the discussion of analyses methodologies. These two

task forces in conjunction with ad hoc committees representing other interests in the community provided the critical local input to the Fort Drum FIA.

The preliminary FIA is only the first step in the growth management process. Once the preliminary FIA is completed, the Steering Council becomes the repository for the FIA computer model, and its focus then shifts to monitoring growth and growth-related impacts. The FIA model is used to perform that monitoring. The model is structured so actual information can be entered into the analysis framework as the shift is made from forecasting to monitoring. Monitoring is an important part in the management of growth, for it is through monitoring that the assumptions for the preliminary analysis are verified. If basic assumptions made in the preliminary FIA are incorrect or if they change, monitoring can provide an early warning of potential problems. By using the FIA framework to monitor growth and growth-related impacts, local jurisdictions can manage growth, minimizing problems, and maximizing benefits instead of reacting to problems.

The state is another key part of the growth management process. New York State has many programs and offices that can assist local communities in planning for growth. They also have the resources to assist with capital requirements and to ameliorate other fiscal problems when they occur. The state has expressed its willingness to become an active participant in the Fort Drum expansion and has already provided resources and technical assistance. The New York State's Fort Drum Task Force will continue to serve as a focal point and catalyst in coordinating a state response to the needs of the impact area.

THE OFFICE OF ECONOMIC ADJUSTMENT'S ROLE

Under Executive Order 12409, OEA is the lead office and coordinator of Federal assistance to local communities impacted by the expansion of military bases. Its first responsibility is to identify, in conjunction with the Military Services, those locations at which FIAs are needed. The EIS examines the macro-level economic

impacts and provides the basis for determining whether a more detailed fiscal analysis is required. If a base expansion requires an FIA, OEA then performs an analysis of the fiscal impacts that are expected to be associated with the base expansion.

The FIA identifies impacts and analyzes the capabilities of the local jurisdictions. If the short-term costs of growth exceed the fiscal capabilities of local jurisdictions, OEA, in its role as the lead Federal agency for the President's EAC, becomes the primary coordination point between the state and local communities and the Federal government for intergovernmental assistance. Executive guidance states that local and state programs and then-existing Federal programs be utilized to provide assistance wherever possible. When existing Federal programs are not capable of providing the needed assistance, OEA takes the lead in coordinating any additional Federal financial support.

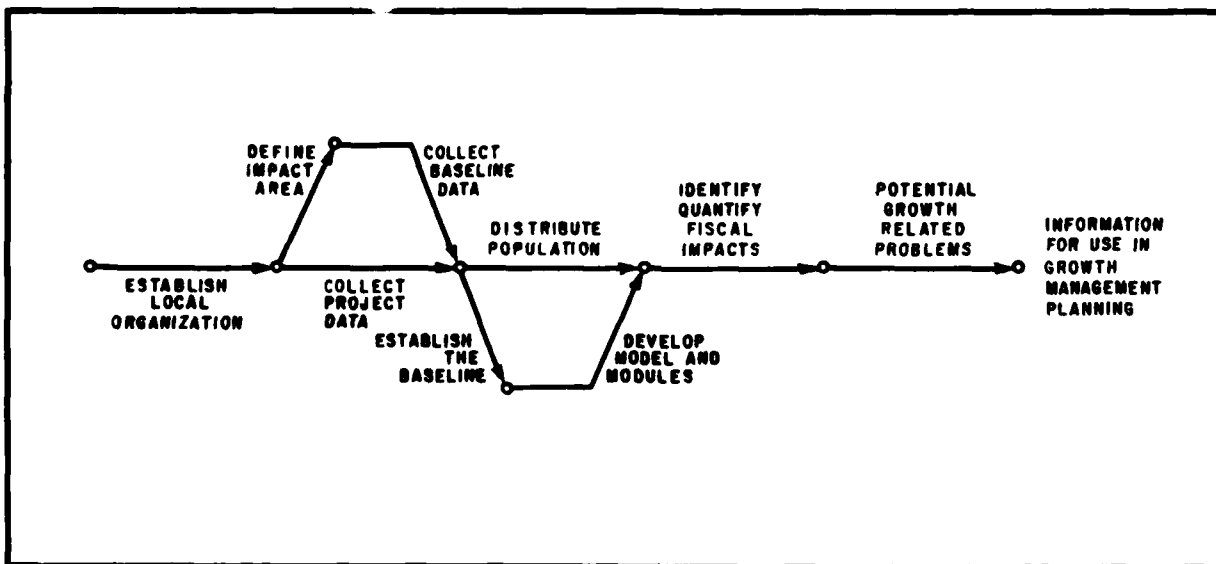
Another key OEA role is that of catalyst for organizing local communities to manage growth. Many communities have never had to manage rapid growth and are not prepared initially to address the key issues that must be resolved early during a rapid base expansion. Planning for dealing with these issues is essential if communities are to avoid or mitigate the negative consequences of rapid growth. OEA provides assistance in establishing steering councils and local committees to address growth issues. It can also provide information on growth management to these local organizations and place them in contact with other communities that have experienced rapid growth as the result of military base expansions. The ability of the local communities to manage growth is the critical issue facing local jurisdictions. How well they address that issue will determine whether the Fort Drum expansion benefits the communities or becomes a source of short-term problems.

3. TECHNICAL APPROACH

FIA MODEL AND MODULES

Figure 3-1 shows the nine major tasks that constitute a PFIA and the sequence in which they must be completed. The PFIA process begins with the establishment of a local organization and progresses through data collection to analysis and, finally, to publication of the Preliminary FIA. The same process can be used to update the preliminary results.

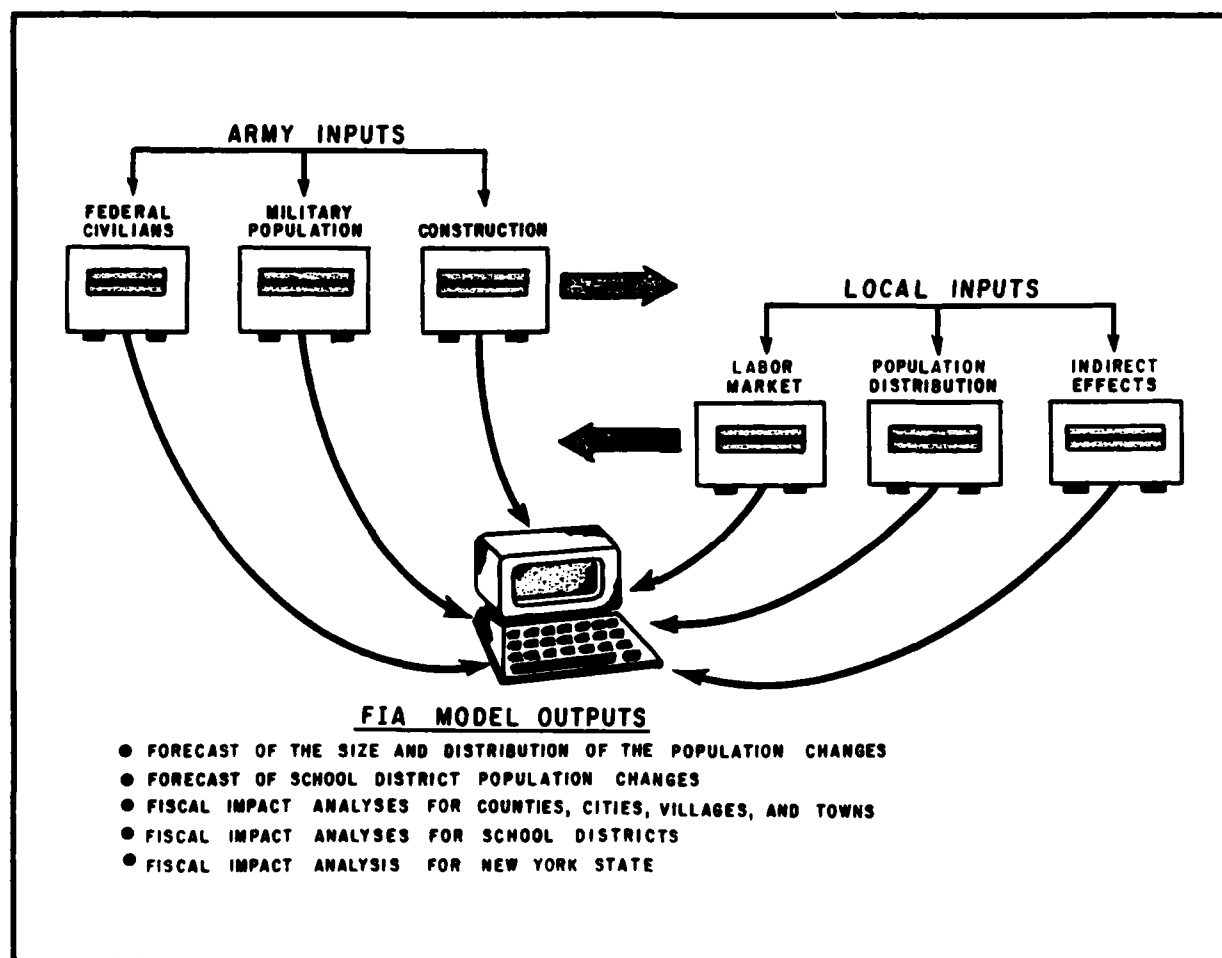
FIGURE 3-1. PRELIMINARY FIA PROCESS



In developing the Fort Drum PFIA, the large amount of data and the need for updating the results necessitated the use of a computer-based approach. A microcomputer was selected as the most appropriate hardware. By using a low-cost microcomputer with off-the-shelf software, the monitoring resource requirements could be held to a minimum while still providing sufficient computing and analysis

capabilities. The approach was to establish an analytical framework—the FIA model—that could be applied to each jurisdiction. The FIA model is maintained on a microcomputer and is supported by six modules (Figure 3-2).

FIGURE 3-2. FIA MODEL AND MODULES



The six modules, or subanalyses of specific factors, all provide input data to the FIA model. Three modules are based on Army inputs and three on local inputs. The Army provides information for the Federal civilian, military population, and construction modules; the local jurisdictions provide information for the labor market, population distribution, and indirect effects modules. These modules are

key determinants of growth impacts and changes to any of them can be rippled through the model and analytic responses given to program alterations or scenario planning changes. Each module is briefly discussed in the following subsections.

Construction Module

The construction module takes the Army's construction program and subdivides it into its component parts: labor costs, materials costs, overhead and profit, and government administration costs. It also distributes the construction activity over 2 years and estimates the annual number of construction jobs that will be required. The outputs from this module are also used in the population distribution module and the indirect effects module.

Military Population Module

The military population module is primarily a mechanism for tabulating information on the military personnel. This module uses the Army's projected end strength in conjunction with the anticipated demographics (number married, family size, etc.) of the new military population to generate the number of military and dependents expected. It also uses the grade structure of the 10th Mountain Division to calculate the salaries that will be brought to the area. The population and salary summaries from this module are then used as inputs to the population distribution and the indirect effects modules.

Federal Civilian Module

The Federal civilian module is similar to the military population module. New Federal civilians are assumed to be representative of national demographics in terms of family size, number married, etc. The population increase generated by the new Federal civilians and their salaries is used in the population distribution module and the indirect effects module.

Labor Market Module

The labor market module analyzes the supply and demand for labor in the impact area. The module assesses the balance between supply and demand in the labor market at the beginning of the project and identifies the new demand for each year of the project. After the first year of the project, the supply-and-demand interaction in the labor market is done in the FIA model. The demand for labor in each year and the first year supply-and-demand picture are inputs to the FIA model.

Indirect Effects Module

The indirect effects module is a regional input-output analysis that takes data from the other modules and estimates the indirect effects caused by the project. This module reflects the characteristics of the tri-county economy and the economic changes associated with the expansion. The module outputs are the indirect salaries and jobs that will be created by the expansion. These outputs are fed into the population distribution module and the labor market module.

Population Distribution Module

The population distribution module utilizes the characteristics of towns, villages, and cities to forecast where the new population will live. Seventeen characteristics were used initially to develop distribution factors. The relative importance of each characteristic was determined by committees of local residents familiar with development in the area. Four of the initial seventeen characteristics were judged to be the most important. The four are, in order of importance: availability of a public water system, travel time to Fort Drum, availability of a public sewage system, and the availability of commercial services. In addition to these characteristics, it is necessary to consider the number of housing units the Army intends to build on Fort Drum, the planned Section 801 housing, the existing housing stock, and planned housing developments. These factors, in conjunction with the characteristic ratings for each jurisdiction, drive the population distribu-

tion forecast (a detailed description of the methodology is contained in the technical appendices to this Preliminary FIA), and the forecast of the expected distribution is used to quantify growth impacts expected in jurisdictions in the FIA model.

DATA SOURCES

The data to support the FIA was obtained from a number of sources. Fiscal data was obtained from New York State through the extension program at Cornell University and is based upon annual reports that are required of all jurisdictions in the State of New York. Project data was obtained from the Department of the Army and its subordinate organizations. Supplementing these two major data sources is data collected by members of various Fort Drum Steering Council Task Forces. Collected data is used in conjunction with the FIA model to forecast baseline conditions and to quantify the anticipated project-related impacts.

4. PRELIMINARY FISCAL IMPACTS ON LOCAL GOVERNMENTS

IMPACT AREA DEFINITION

The impact area was initially defined to include all local governments in the three-county area surrounding Fort Drum. However, since the major fiscal impacts associated with a military base expansion are imposed by population increases, further refinement of the impact area and quantification of impacts is almost totally dependent upon the distribution of the immigrating population within the three counties. Thus, an accurate forecast of the expected distribution of the immigrating population is a key part of the analysis. A description of the methodology for making the population distribution is presented in Chapter 3 and the technical appendices.

At this time, seven jurisdictions (or aggregations of jurisdictions) have been identified for detailed Preliminary FIAs (PFIAs): Watertown City, the three county governments, and the aggregation of the impacted towns and villages within each of the three counties. This chapter describes the impacts on revenues, expenditures, and capital requirements for each of these seven groupings as well as for the total impact area. It does not include the impact estimates for individual towns and villages. School district and state-level PFIAs are presented in Chapters 5 and 6.

BASELINE CONDITIONS

An assessment of the fiscal impacts on a jurisdiction begins with the establishment of the baseline conditions for the jurisdiction. The term baseline conditions refers to the status of key jurisdiction characteristics without project-related changes; those characteristics include population changes, expected revenues, expected expenditures, and anticipated capital requirements. The baseline conditions are then compared with projected conditions to determine the project-related impacts. Local information is a key part of the development of

baseline conditions for a jurisdiction since local and state officials often are the best source of data and frequently are the only individuals who can accurately interpret data and forecast trends. Local and state officials were consulted during the establishment of baseline conditions for Fort Drum area communities.

The baseline analysis shows that the impact area is expected to have few changes in population or the economy if the Fort Drum expansion were not to occur. The population is forecast to increase less than 1 percent between 1985 and 1990. Based on trend analyses and consultations with local budget officers, government finances are expected to be relatively stable except for the phasing out of Federal Revenue Sharing in Fiscal Year 1987. Similarly, no major changes in the basic structure of the economy are anticipated, such as the addition of a new major employer, etc. Nothing indicates that the existing sluggish economy would be revived through normal market forces. Rather, it is more likely that the trend of business (jobs) leaving the area would continue in the absence of any major change. The baseline analysis indicates that the tri-county area would exhibit a stagnant economy with little population or other growth if Fort Drum did not expand.

The establishment of the baseline condition for the impact area is a necessary prelude to analyzing the growth-related impacts of the Fort Drum expansion. The baseline shows "where a community currently is" from a fiscal perspective and its capital plans for the future. Both of these factors are important when analyzing the effect that Fort Drum-related growth will have on a community. The fiscal impact can be determined by combining the baseline conditions with the expected growth-related impacts.

ANTICIPATED IMPACT

Growth-related impacts can be categorized into three groups: Population changes, effects on the operating budgets of jurisdictions, and effects on the capital budgets of jurisdictions. Of the three, population change is the most important since,

to a large degree, it determines the effect on budgets and capital programs and is the most likely impact to be altered by the requirements of the project. A change in the base load-up schedule (the Army schedule for the assignment of personnel), for example, affects all other impacts and can greatly alter the situation in any given jurisdiction.

The operating budget of a jurisdiction is the statement of revenues and expenditures required to maintain such services as general government, public safety, public health, highway maintenance, etc., and it is directly affected by changes in population. An increase in population is accompanied by a corresponding increase in the operating expenditures and revenues. The increase in expenditures generally occurs in the year that the new population arrives, while the increase in revenues can often lag by a year. This lag is particularly apparent in the case of property taxes and other government revenues that are based on population or assessed valuation where allocation formulas are only changed once a year and are often based upon the previous year's data.

Capital budgets are also affected by changes in the population. Capital requirements, however, are not as directly linked to changes in population as are the operating budgets. While an increase in population will certainly not cause a decrease in capital requirements, it will not necessarily cause an increase. Many jurisdictions in the tri-county area have excess capacity in many types of capital facilities (infrastructure), which means that additional population does not necessarily require new capital projects. Each jurisdiction must be examined to determine whether a given population increase will generate a corresponding increase in the capital budget or whether excess capacity can meet the new infrastructure requirements.

The growth-related impacts for the three categories (population, operating budget, and capital budget) are analyzed for each of the major jurisdictions that are

expected to be affected by the anticipated growth in the region. In the following sections, impacts are assessed for the impact area as a whole, for the three counties (Jefferson County, Lewis County, and St. Lawrence County), for Watertown City, and for the aggregates of impacted towns and villages within each of the three counties.

AREA GROWTH IMPACTS

The expected growth impacts on the impact area resulting from the expansion of Fort Drum will be significant but not overwhelming. Table 4-1 summarizes growth impacts for jurisdictions that are affected significantly. It does not include St. Lawrence and Lewis Counties. This was done because inclusion of these counties with their large revenue and expenditure bases could be viewed as distorting overall relative impacts. The population is expected to increase by approximately 29,000 by 1990 (see Table 4-1). This is a 21 percent increase over the expected 1990 baseline population. The peak growth occurs in 1987 and 1988, with annual growth rates of 7.8 and 5.6 percent, respectively. More than 6,300 new civilian jobs will be created as a result of the expansion. By 1990, these new jobs in conjunction with the 9,400 new military jobs will generate \$287 million a year in new salaries to the impact area.

The operating budgets of the impact area jurisdictions will similarly be affected. New revenues associated with the additional population will increase to \$22.2 million per year by 1990. The mechanics for adding property to the tax rolls and the methods for calculating the size of various intergovernmental payments cause the growth in revenues to lag the growth in expenditures, which will peak at \$18.2 million per year in 1989. The annual cash flow from the new population, revenues minus expenditures, will be negative through 1988 (for example, \$2.9 million in 1987) because of the lag in certain categories of revenues. By 1990, the positive cash flow from the new population will be \$4.0 million annually.

TABLE 4-1. IMPACT AREA BASELINE CONDITIONS AND NEW PROJECT-RELATED GROWTH^a

(\$'s are Expressed in Millions of Constant 1985 Dollars)

	FY85	FY86	FY87	FY88	FY89	FY90	TOTAL CHANGE
Population Baseline Project Related	136,891 301	137,318 5,664	137,744 16,319	138,170 24,592	138,597 28,712	139,024 28,712	2,133 28,712
New Civilian Jobs Direct ^b Indirect	332 122	362 733	567 1,290	699 1,084	421 549	126 40	2,507 3,818
New Salaries Direct ^c Indirect	\$7.5 \$2.7	\$44.9 \$16.2	\$116.3 \$41.9	\$176.2 \$63.5	\$207.5 \$74.8	\$211.0 \$76.0	\$211.0 \$76.0
	FY85	FY86	FY87	FY88	FY89	FY90	TOTAL CHANGE
Revenues Baseline Project Related	\$104.3 \$0.1	\$104.6 \$1.9	\$104.9 \$7.6	\$101.4 \$14.6	\$101.7 \$19.6	\$101.9 \$22.2	(\$2.4) \$22.2
Expenditures Baseline Project Related	\$88.5 \$0.2	\$88.8 \$4.2	\$89.0 \$10.5	\$89.4 \$15.1	\$89.6 \$18.2	\$89.9 \$18.2	\$1.4 \$18.2
Capital Expenditures Baseline Project Related	\$24.4	\$24.5 \$2.4	\$24.6 \$2.9	\$24.7 \$0	\$24.7 \$0	\$24.8 \$0	\$147.7 \$5.3

^aBaseline conditions and project-related growth are cumulative except for new civilian jobs and capital expenditures.

^bThe direct job total includes federal civilian employees and construction workers residing in the area. Commuters are not counted as new jobs.

^cSalaries for new civilian and new military jobs.

The new population will require additional capital spending to provide the needed infrastructure. The total capital requirement (not including water, sewer, and solid waste disposal) will be \$5.3 million by 1990. The water, sewer, and solid waste needs will be met by current local jurisdiction plans for 1986 and 1987 and by a combination of local jurisdiction and Development Authority of the North Country (DANC) plans for 1988 and beyond. These requirements are detailed in Table 4-2. Initial DANC capital requirements are expected to be supported by a combination of up-front capital contribution and subsequent usage fees. Jurisdiction budgets will

be affected to the extent that DANC purchases or leases facilities from jurisdictions or that the jurisdictions provide their own services. These fiscal flows are dependent upon DANC plans and specific agreements with jurisdictions, both of which are unknown at this time. Accurately accounting for these flows will be a necessary activity in follow-on studies that can be used to update the FIA.

TABLE 4-2. WATER, SEWER, AND SOLID WASTE CAPITAL REQUIREMENTS

(\$'s are Expressed in Millions of Constant 1985 Dollars)

	FY85	FY86	FY87	FY88	FY89	FY90
DANC						
Sewer						
Mains, etc.						
Plant						
				\$27.4		
				\$8.9		
Solid Waste ERF ^a					\$18.9	
						Total = \$55.2

^aSolid Waste ERF is an energy recovery facility for the disposal of solid waste.

COUNTY GROWTH IMPACTS

Jefferson County

Jefferson County is expected to receive 82 percent of the new population and a majority of the accompanying growth impacts (see Table 4-3). This population increase includes the new military and dependents living on Fort Drum and represents a 26 percent increase over the expected 1990 baseline population of 90,660. The peak growth occurs in 1987 and 1988, with annual growth rates of 9.5 and 6.9 percent, respectively. The 1990 Jefferson County population is expected to be more than 114,000 with the Fort Drum expansion.

The revenue and expenditure flows for the county mirror those of the impact area. Annual new revenues are expected to increase and peak at

\$11.3 million by 1990; annual new expenditures are expected to increase and peak in 1989 at \$10.4 million.

TABLE 4-3. JEFFERSON COUNTY BASELINE CONDITIONS AND NEW PROJECT-RELATED GROWTH^a

(\$'s are Expressed in Millions of Constant 1985 Dollars)

	FY85	FY86	FY87	FY88	FY89	FY90	TOTAL CHANGE
Population							
Baseline	89,269	89,547	89,825	90,103	90,381	90,660	1,391
Project Related	247	4,878	13,554	20,396	23,867	23,867	23,867
New Civilian Jobs							
Direct ^b	270	238	363	495	304	103	1,773
Indirect	85	589	1,051	887	446	33	3,091
New Salaries							
Direct ^c	\$6.2	\$37.4	\$97.5	\$147.6	\$173.8	\$176.8	\$176.8
Indirect	\$2.2	\$13.5	\$35.1	\$53.2	\$62.6	\$63.6	\$63.6

	FY85	FY86	FY87	FY88	FY89	FY90	TOTAL CHANGE
Revenues							
Baseline	\$50.2	\$50.3	\$50.5	\$49.2	\$49.3	\$49.5	(\$0.7)
Project Related	\$0.4	\$0.8	\$3.7	\$7.3	\$9.9	\$11.3	\$11.3
Expenditures							
Baseline	\$46.0	\$46.2	\$46.3	\$46.5	\$46.6	\$46.8	\$0.8
Project Related	\$0.1	\$2.4	\$6.0	\$8.7	\$10.4	\$10.4	\$10.4
Capital Expenditures							
Baseline	\$3.0	\$3.0	\$3.0	\$3.1	\$3.1	\$3.1	\$18.3
Project Related	\$0	\$1.5	\$2.9	\$0	\$0	\$0	\$4.4

^aBaseline conditions and project-related growth are cumulative except for new civilian jobs and capital expenditures.

^bThe direct job total includes federal civilian employees and construction workers residing in the area. Commuters are not counted as new jobs.

^cSalaries for new civilian and new military jobs.

The county will need additional capital facilities in the general government and police areas, which will total \$4.4 million by 1990. These requirements will occur in 1986 and 1987 and represent a substantial increase over the baseline for capital spending in those 2 years.

Lewis County

Lewis County is expected to receive 10 percent of the new population and accompanying growth effects (see Table 4-4). This increase, while only about one-eighth that of Jefferson County, constitutes an increase of 10 percent over the

expected 1990 baseline population of 25,665. The peak growth occurs in 1987 and 1988, with annual growth rates of 4.2 and 3.4 percent, respectively.

TABLE 4-4. LEWIS COUNTY BASELINE CONDITIONS AND NEW PROJECT-RELATED GROWTH^a

(\$'s are Expressed in Millions of Constant 1985 Dollars)

	FY85	FY86	FY87	FY88	FY89	FY90	TOTAL CHANGE
Population							
Baseline	25,350	25,413	25,476	25,539	25,602	25,665	315
Project Related	28	557	1,582	2,440	2,893	2,893	2,893
New Civilian Jobs							
Direct ^b	37	56	91	100	58	14	356
Indirect	4	73	138	118	58	4	394
New Salaries							
Direct ^c	\$0.8	\$4.7	\$12.1	\$18.4	\$21.7	\$22.0	\$22.0
Indirect	\$0.3	\$1.7	\$4.4	\$6.7	\$7.9	\$8.0	\$8.0

	FY85	FY86	FY87	FY88	FY89	FY90	TOTAL CHANGE
Revenues							
Baseline	\$22.2	\$22.3	\$22.3	\$21.9	\$22.0	\$22.0	(\$0.2)
Project Related	\$0.1	\$0.3	\$1.0	\$1.8	\$2.3	\$2.5	\$2.5
Expenditures							
Baseline	\$21.4	\$21.4	\$21.4	\$21.5	\$21.6	\$21.7	\$0.3
Project Related	\$0.2	\$0.5	\$1.4	\$2.0	\$2.4	\$2.4	\$2.4
Capital Expenditures							
Baseline	\$1.2	\$1.2	\$1.2	\$1.2	\$1.2	\$1.2	\$7.2
Project Related	\$0	\$0.2	\$0	\$0	\$0	\$0	\$0.2

^aBaseline conditions and project-related growth are cumulative except for new civilian jobs and capital expenditures.

^bThe direct job total includes federal civilian employees and construction workers residing in the area. Commuters are not counted as new jobs.

^cSalaries for new civilian and new military jobs.

The revenue and expenditure flows for Lewis County have the same characteristics as those for Jefferson County. Annual new revenues will increase and peak at \$2.5 million in 1990. Annual new expenditures will increase and peak in 1989 at \$2.4 million.

Lewis County is expected to experience minimal increases in its capital budget as a result of the new population. An additional \$200,000 will be required in 1986 for general government to accommodate an increase in the county staff.

St. Lawrence County

St. Lawrence County is expected to experience negligible growth effects as a consequence of the expansion of Fort Drum (see Table 4-5). Six percent of the new population is expected to live in St. Lawrence County. This constitutes a 1.4 percent increase in the expected 1990 baseline population of 117,274, with a peak annual growth rate of less than 1 percent.

TABLE 4-5. ST. LAWRENCE COUNTY BASELINE CONDITIONS AND NEW PROJECT-RELATED GROWTH^a

(\$'s are Expressed in Millions of Constant 1985 Dollars)

	FY85	FY86	FY87	FY88	FY89	FY90	TOTAL CHANGE
Population Baseline	115,724	116,034	116,344	116,654	116,964	117,274	1,550
Project Related	18	280	910	1,389	1,627	1,627	1,627
New Civilian Jobs Direct ^b	21	55	92	87	48	8	311
Indirect	2	39	75	64	31	2	214
New Salaries Direct ^c	\$0.4	\$2.2	\$5.6	\$8.6	\$10.2	\$10.5	\$10.5
Indirect	\$0.2	\$0.9	\$2.1	\$3.2	\$3.7	\$3.8	\$3.8

	FY85	FY86	FY87	FY88	FY89	FY90	TOTAL CHANGE
Revenues Baseline	\$60.3	\$60.5	\$60.7	\$59.1	\$59.2	\$59.4	(\$0.9)
Project Related	\$0.0	\$0.1	\$0.2	\$0.5	\$0.7	\$0.8	\$0.8
Expenditures Baseline	\$59.5	\$59.7	\$59.9	\$60.0	\$60.2	\$60.3	\$0.8
Project Related	\$0.1	\$0.1	\$0.5	\$0.7	\$0.8	\$0.8	\$0.8
Capital Expenditures Baseline	\$2.6	\$2.6	\$2.6	\$2.6	\$2.6	\$2.6	\$15.6
Project Related	\$0	\$0	\$0	\$0	\$0	\$0	\$0

^aBaseline conditions and project-related growth are cumulative except for new civilian jobs and capital expenditures.

^bThe direct job total includes federal civilian employees and construction workers residing in the area. Commuters are not counted as new jobs.

^cSalaries for new civilian and new military jobs.

The effect on the St. Lawrence County operating budget will be minimal. Annual new revenues are expected to increase and peak at \$800,000 in 1990, and annual new expenditures are expected to increase and peak in 1989 at \$800,000.

No capital requirements will be imposed on St. Lawrence County as a result of the Fort Drum expansion.

WATERTOWN CITY GROWTH IMPACTS

Thirteen percent of the new population growth between 1985 and 1990 is expected to reside in Watertown City (see Table 4-6). However, because of the

TABLE 4-6. WATERTOWN CITY BASELINE CONDITIONS AND NEW PROJECT-RELATED GROWTH^a

(\$ are Expressed in Millions of Constant 1985 Dollars)

	FY85	FY86	FY87	FY88	FY89	FY90	TOTAL CHANGE
Population							
Baseline	28,654	28,735	28,815	28,896	28,976	29,057	403
Project Related	75	1,706	3,240	3,733	3,987	3,988	3,988
New Civilian Jobs							
Direct ^b	51	332	237	148	83	16	867
Indirect	5	86	163	139	68	5	466
New Salaries							
Direct ^c	\$1.0	\$9.4	\$17.0	\$22.0	\$24.7	\$25.1	\$25.1
Indirect	\$0.4	\$3.4	\$6.1	\$7.9	\$8.9	\$9.0	\$9.0

	FY85	FY86	FY87	FY88	FY89	FY90	TOTAL CHANGE
Revenues							
Baseline	\$21.3	\$21.4	\$21.5	\$21.5	\$21.6	\$21.6	(\$0.3)
Project Related	\$0.2	\$0.6	\$1.8	\$2.6	\$2.8	\$2.9	\$2.9
Expenditures							
Baseline	\$16.7	\$16.8	\$16.8	\$16.9	\$16.9	\$16.9	\$0.2
Project Related	\$0.4	\$0.9	\$1.7	\$1.9	\$2.1	\$2.1	\$2.1
Capital Expenditures							
Baseline	\$13.8	\$13.9	\$13.9	\$14.0	\$14.0	\$14.0	\$83.6
Project Related	\$0	\$0.7	\$0	\$0	\$0	\$0	\$0.7

^aBaseline conditions and project-related growth are cumulative except for new civilian jobs and capital expenditures.

^bThe direct job total includes federal civilian employees and construction workers residing in the area. Commuters are not counted as new jobs.

^cSalaries for new civilian and new military jobs.

planned development of several housing projects including Army Section 801 housing, it is expected to receive a greater percentage in the first 2 years of the project, 1986 and 1987. The relative percentage increase will then decline in 1988 through 1990. The city population will increase by 14 percent, from 29,000 to 33,000

by 1990, with the peak growth occurring in 1986 and 1987. The annual growth rates in those 2 years will be 6.0 and 5.3 percent, respectively.

The operating budget of Watertown City will increase significantly as a result of the new growth, with the annual new revenues increasing and peaking at \$2.9 million by 1990. The annual new expenditures will increase and peak at \$2.1 million in 1989. The positive cash flow occurs earlier than in the other jurisdictions analyzed and is a result of the recent high level of capital spending by the City of Watertown. The increased population will require additional capital spending of \$700,000 for fire, police, and general government facilities in 1986.

GROWTH IMPACTS IN TOWNS, VILLAGES, AND CITIES

Jefferson County Towns, Villages, and Cities

Jefferson County towns, villages, and cities are expected to receive 82 percent of the new population. The towns and villages in Jefferson County will experience the majority of impact area town and village effects (see Table 4-7). All towns and villages are expected to receive some impacts. The aggregation of jurisdictions (the aggregation used in this section includes Watertown City) will have a population increase of 26 percent over the expected 1990 baseline population of 90,660. The peak growth occurs in 1987 and 1988, with annual growth rates of 9.5 and 6.9 percent, respectively. The aggregate population for towns, villages, and cities in Jefferson County is expected to be more than 114,000 with the Fort Drum expansion.

The revenue and expenditure flows are somewhat different from those expected in the Jefferson County government. Towns and villages will have a more favorable cash flow than the county because of their lower level of per capita expenditures. Annual new revenues are expected to increase and peak in 1990 at \$9.8 million; annual new expenditures are expected to increase and peak in 1989 at \$7 million. The annual cash flow becomes positive in 1988.

**TABLE 4-7. JEFFERSON COUNTY IMPACTED TOWNS, VILLAGES,
AND CITIES BASELINE CONDITIONS AND NEW
PROJECT-RELATED GROWTH^a**

(\$'s are Expressed in Millions of Constant 1985 Dollars)

	FY85	FY86	FY87	FY88	FY89	FY90	TOTAL CHANGE
Population							
Baseline	89,269	89,547	89,825	90,103	90,381	90,660	1,391
Project Related	247	4,878	13,554	20,396	23,867	23,867	23,867
New Civilian Jobs							
Direct ^b	270	238	363	495	304	103	1,773
Indirect	85	589	1,051	887	446	33	3,091
New Salaries							
Direct ^c	\$6.2	\$37.4	\$97.5	\$147.6	\$173.8	\$176.8	\$176.8
Indirect	\$2.2	\$13.5	\$35.1	\$53.2	\$62.6	\$63.6	\$63.6

	FY85	FY86	FY87	FY88	FY89	FY90	TOTAL CHANGE
Revenues							
Baseline	\$42.6	\$42.7	\$42.8	\$41.3	\$41.4	\$41.5	(\$1.1)
Project Related	\$0.4	\$1.0	\$3.6	\$6.6	\$8.7	\$9.8	\$9.8
Expenditures							
Baseline	\$33.0	\$33.1	\$33.3	\$33.4	\$33.5	\$33.6	\$0.6
Project Related	\$0.1	\$1.6	\$4.0	\$5.8	\$7.0	\$7.0	\$7.0
Capital Expenditures							
Baseline	\$18.5	\$18.6	\$18.6	\$18.7	\$18.7	\$18.8	\$111.9
Project Related	\$0	\$0.7	\$0	\$0	\$0	\$0	\$0.7

^aBaseline conditions and project-related growth are cumulative except for new civilian jobs and capital expenditures.

^bThe direct job total includes federal civilian employees and construction workers residing in the area. Commuters are not counted as new jobs.

^cSalaries for new civilian and new military jobs.

The capital requirements for towns, villages, and cities will depend on the extent to which DANC meets regional needs for sewage treatment and solid waste disposal.

Lewis County Towns and Villages

Lewis County towns and villages are expected to receive 10 percent of the new population and accompanying growth effects (see Table 4-8). This increase,

**TABLE 4-8. LEWIS COUNTY IMPACTED TOWNS AND VILLAGES
BASELINE CONDITIONS AND NEW
PROJECT-RELATED GROWTH^a**

(\$'s are Expressed in Millions of Constant 1985 Dollars)

	FY85	FY86	FY87	FY88	FY89	FY90	TOTAL CHANGE
Population Baseline Project Related	24,753 28	24,816 557	24,879 1,582	24,942 2,440	25,005 2,893	25,068 2,893	315 2,893
New Civilian Jobs Direct ^b Indirect	37 4	56 73	91 138	100 118	58 58	14 4	356 394
New Salaries Direct ^c Indirect	\$0.8 \$0.3	\$4.7 \$1.7	\$12.1 \$4.4	\$18.4 \$6.7	\$21.7 \$7.9	\$22.1 \$8.0	\$22.1 \$8.0

	FY85	FY86	FY87	FY88	FY89	FY90	TOTAL CHANGE
Revenues Baseline Project Related	\$5.8 \$0.1	\$5.8 \$0.4	\$5.8 \$0.2	\$5.5 \$0.4	\$5.5 \$0.6	\$5.5 \$0.7	(\$0.3) \$0.7
Expenditures Baseline Project Related	5.0 \$0.1	5.0 \$0.1	5.0 \$0.3	5.0 \$0.4	5.0 \$0.5	5.0 \$0.5	\$0 \$0.5
Capital Expenditures Baseline Project Related	\$1.4 \$0	\$1.4 \$0	\$1.4 \$0	\$1.5 \$0	\$1.5 \$0	1.5 \$0	\$8.7 \$0

^aBaseline conditions and project-related growth are cumulative except for new civilian jobs and capital expenditures.

^bThe direct job total includes federal civilian employees and construction workers residing in the area. Commuters are not counted as new jobs.

^cSalaries for new civilian and new military jobs.

while only about one-eighth that of Jefferson County, constitutes an increase of 11 percent over the expected 1990 baseline population of 25,068. The peak growth occurs in 1987 and 1988, with annual growth rates of 4.3 and 3.5 percent, respectively.

The revenue and expenditure flows for towns and villages in Lewis County have the same characteristics as those for Jefferson County. Annual new

revenues will increase and peak at \$700,000 in 1990. Annual new expenditures will increase and peak at \$500,000 in 1989. The annual cash flow will become positive in 1988.

The capital requirements for towns and villages will depend on the extent to which DANC meets regional needs for sewage treatment and solid waste disposal.

St. Lawrence County Towns and Villages

St. Lawrence County towns and villages are expected to experience few growth effects as a consequence of the Fort Drum expansion (see Table 4-9). Six percent of the new population is expected to live in St. Lawrence County towns and villages. This constitutes a 7 percent increase in the expected baseline population of 23,206. The peak growth occurs in 1987 and 1988, with annual growth rates of 3 and 2.3 percent, respectively.

The revenue and expenditure flows for towns and villages have the same characteristics as those exhibited by the towns and villages in Jefferson and Lewis Counties. Annual new revenues are expected to increase and peak at \$400,000 in 1990, and annual new expenditures are expected to increase and peak in 1989 at \$300,000. The annual new cash flow will become positive in 1988.

The capital requirements for towns and villages will depend on the extent to which DANC meets regional needs for sewage treatment and solid waste disposal.

SUMMARY OF THE GROWTH IMPACTS

The tri-county area will be significantly affected by the growth generated from the expansion of Fort Drum. Jefferson County will bear the major portion of the effects, and Lewis County will be affected to a lesser extent. The City of Watertown will receive most of the early (1986-1987) effects and a significant portion of the total effects. The new population will initially create a drain on jurisdiction operating budgets that will last for the first several years of the project. After that, the new population will pay for itself on an operating basis by 1990. The requirement for

**TABLE 4-9. ST. LAWRENCE COUNTY IMPACTED TOWNS AND VILLAGES
BASELINE CONDITIONS AND NEW
PROJECT-RELATED GROWTH^a**

(\$'s are Expressed in Millions of Constant 1985 Dollars)

	FY85	FY86	FY87	FY88	FY89	FY90	TOTAL CHANGE
Population Baseline Project Related	22,881 18	22,946 280	23,011 910	23,076 1,389	23,141 1,627	23,206 1,627	325 1,627
New Civilian Jobs Direct ^b Indirect	21 2	55 39	92 75	97 64	48 31	8 2	321 214
New Salaries Direct ^c Indirect	\$4 \$.2	\$2.2 \$.9	\$5.6 \$2.1	\$8.6 \$3.1	\$10.2 \$3.7	\$10.5 \$3.8	\$10.5 \$3.8
	FY85	FY86	FY87	FY88	FY89	FY90	TOTAL CHANGE
Revenues Baseline Project Related	\$5.7 \$0	\$5.7 \$.02	\$5.7 \$.1	\$5.4 \$.3	\$5.4 \$.4	\$5.4 \$.4	(\$0.3) \$.4
Expenditures Baseline Project Related	\$4.5 \$0	\$4.5 \$.05	\$4.5 \$.2	\$4.5 \$.2	\$4.5 \$.3	\$4.5 \$.3	\$0 \$.3
Capital Expenditures Baseline Project Related	\$1.0 \$0	\$1.0 \$0	\$1.0 \$0	\$1.0 \$0	\$1.0 \$0	\$1.0 \$0	\$6.0 \$0

^aBaseline conditions and project-related growth are cumulative except for new civilian jobs and capital expenditures.

^bThe direct job total includes federal civilian employees and construction workers residing in the area. Commuters are not counted as new jobs.

^cSalaries for new civilian and new military jobs.

additional capital spending for new facilities will total \$5.3 million for general government, fire, police, etc.

5. PRELIMINARY FISCAL IMPACTS ON SCHOOL DISTRICTS

IMPACT AREA DEFINITION

The School District Impact Area is made up of those school districts surrounding Fort Drum whose student populations will be noticeably increased by the expansion. The distribution of immigration to the school districts was made using the analysis explained in Chapter 3. Children associated with 800 new on-post housing units were allocated 75 percent to the Carthage School District and 25 percent to Indian River. The projections identified 20 school districts as potentially affected, with 11 in Jefferson County, 5 in Lewis County, and 4 in St. Lawrence County. This initial list was reduced to 6 districts that will experience both significant increases in enrollments and impacts (see Table 5-1).

TABLE 5-1. STUDENT INMIGRATION

(School Districts with Significant Impacts)

SCHOOL DISTRICT	SCHOOL AGE DEPENDENT INMIGRATION			AVAILABLE SEATS*			CURRENT DISTRICT ENROLLMENT	PERCENT INCREASE
	K-6	7-12	Total	K-6	7-12	TOTAL		
Watertown City	630	359	989	226	349	575	4,327	23
Carthage	727	413	1140	85	54	139	2,875	40
Indian River	535	305	840	262	150	412	1,839	46
General Brown	152	87	239	137	144	281	1,611	15
Thousand Islands	169	97	266	106	122	228	1,127	24
Copenhagen	77	44	121	111	44	155	583	21

*Available seats refers to existing seating capacity above current enrollment. It does not include seats that would become available as a result of declining baseline enrollments.

Six districts – Watertown City, Carthage, Indian River, General Brown, Thousand Islands, and Copenhagen – may have a sizeable immigration in excess of

their current available seats or a significant impact on operating budgets. Those districts were selected for a detailed analysis of their projected fiscal and capital requirements.

Individual school district analyses are driven by the distribution of the expected new population. Although changes in the number of on-base housing units, Section 801 housing, or projected housing developments may alter the anticipated population change in individual districts, the overall forecast of impacts for school districts as a whole are not expected to change significantly.

BASELINE CONDITIONS

The baseline conditions describe important school district characteristics as they would be without the Fort Drum expansion. Recent historical data from the School Districts was used in conjunction with expected population trends to project the fiscal baseline for the impacted districts. Based on information from school officials, the historical data was modified to reflect anticipated changes such as the escalation of teacher salaries and the declining enrollments in the junior and senior high schools. Thus, the baseline school budgets are larger in constant dollars than they would have been had a simple historical projection been used—teacher expenses represent half to three-fourths of a district's operating expenses—school property taxes and state aid are assumed to increase to balance the escalating teacher-related expenses. In the baseline case, the impact area school district budgets will have to be increased, with the majority of the increase being generated by increased property taxes and state aid. The declining enrollments for high schools improve the overall baseline outlook for school districts by providing additional capacity that will be available for new growth and will help mitigate otherwise rising operating costs. In general, school districts in the baseline case face a situation of increasing operating costs, on a per student basis, which is mitigated

somewhat by a decline in high school students. The districts' situations, while not bleak, are not as fiscally sound as those of the political jurisdictions.

ANTICIPATED IMPACTS

Three factors greatly affect the impacts of the Fort Drum expansion and are key to analyzing the effects on school districts. First, the new population has a higher ratio of school age children to total population than currently exists. The current population has 0.19 school-age children per capita while the new population has 0.21, an increase of 10 percent. Because expenses are generated on a per student basis and most revenues are generated on a per capita or household basis, the historical per student and per capita figures used to make the calculations will project the fiscal impact of new students to be slightly negative. Second, under this population distribution, only Watertown, Carthage, and Indian River are expected to have a capital expense. Finally, property-tax income will not show up in school district budgets until a year after the actual increase in students because of the way properties are added to the tax rolls. That lag will create cash flow problems in the early years of the expansion, with the overall cash flow impact of the project on school districts being negative. Operating budgets will be increased, and in some districts, significant capital expenditures will be required to satisfy new space needs.

State aid was assumed to be received in the same year as the new students. It is important that state aid payments correspond with the arrival of new students since they account for over one-half of a typical district's revenues.

Federal impact aid was not lagged. None of the school districts is projected to reach the 20 percent enrollment level for type "A" (Federal children residing on-post) or type "B" (Federal children residing off-post) needed to create "Super A" or "Super B" categories. The "Super A" or "Super B" category is necessary if a school district is to be eligible for significant federal impact aid. The primary reasons that no district made the super categories are the assumed split of on-base students — 25 percent to

Indian River and 75 percent to Carthage – and the relatively low number of on-base housing units expected during the first 3 years of the project. Changes in districting or the number of on-base housing units will greatly affect the Indian River and Carthage school districts and will have to be addressed in follow-on analyses. In the current analysis, most Federal children will be regular type "B," and are expected to generate annual federal impact aid payments of \$42 per student. Under current legislation, Super A and Super B Federal children can potentially require annual aid payments of \$2,555 and \$255, respectively.

Capital requirements are estimated by determining the number of seats required in a district and then applying per student space requirements in conjunction with standard unit costs. Area demographics project steady elementary school enrollments but declining junior/senior high school enrollments from 1985 to 1990. Classroom seats made available by declining baseline enrollments are added to existing available seats to determine how much of the immigration can be satisfied by current facilities. This analysis is made for elementary (grades K to 6) and junior/senior high school (grades 7 to 12). The requirements are then multiplied by 100 square feet per student, which includes classroom, administrative space, hallways, etc. The resultant square footage is multiplied by \$76 per square foot, a typical construction cost for schools in the impact area. Classrooms that are constructed as satellites to existing facilities will likely cost less, while new schools with extraordinary site conditions, etc., may cost more. The assumed construction costs should be representative of average impact area costs.

INDIVIDUAL SCHOOL DISTRICT GROWTH IMPACTS

Watertown

Watertown will be significantly affected by the project. Adequate seating is expected to be provided by existing vacancies and by reopening North Junior School, mitigating any capital requirements. North Junior School is expected to be

renovated at an estimated cost of \$500,000 to provide space for elementary school overflow. The effects on the operating budget will not be as favorable. The school projected property tax is increased by 3 percent per year above inflation to account for the anticipated reaction to the increase in baseline operating expenses (see Table 5-2).

**TABLE 5-2. WATERTOWN SCHOOL DISTRICT BASELINE CONDITIONS
AND NEW PROJECT-RELATED GROWTH^a**

(\$'s are Expressed in Millions of Constant 1985 Dollars)

SCHOOL YEAR:	85-86	86-87	87-88	88-89	89-90	TOTAL CHANGE
Total New Students	207	598	848	989	989	989
Revenues						
Baseline Condition		\$16.8	\$17.1	\$17.3	\$17.6	\$0.8
With Project Growth		\$1.6	\$2.6	\$3.2	\$3.3	\$3.3
Expenditures						
Baseline Condition		\$16.6	\$16.8	\$17.1	\$17.1	\$0.5
With Project Growth		\$2.3	\$3.5	\$3.9	\$3.9	\$3.9
Capital Expenditures						
Baseline Condition		\$0.2	\$0.2	\$0.2	\$0.2	\$0.8
With Project Growth		\$0.5	\$0	\$0	\$0	\$0.5

^aTotal change in revenues and expenditures are associated with 989 new students. Capital requirements are associated with the renovation of North Junior School.

Carthage

The Carthage School District, with the current assumptions, will receive more students than any other district. Its new school population will represent nearly a 40 percent increase in its current enrollment. While Carthage is not expected to have large operating deficits, it will have an immediate capacity problem. The projected operating deficits are small because of the large positive cash flows projected in the baseline case. Carthage's enrollment is currently expanding,

and middle and elementary schools are expected to be filled in 1986. The district recently passed a bond measure to provide funding for potential expansion-related capital requirements. With the Fort Drum expansion, Carthage has a requirement for 849 new seats at an estimated cost of \$6.4 million. The expansion-related impact in 1987 is a negative \$400,000, nearly 2.5 percent of the budget, primarily because of the lag in receiving new property taxes; it is expected to decrease to a negative \$200,000 by the 1989-1990 school year (see Table 5-3).

TABLE 5-3. CARTHAGE SCHOOL DISTRICT BASELINE CONDITIONS AND NEW PROJECT-RELATED GROWTH^a

(\$'s are Expressed in Millions of Constant 1985 Dollars)

SCHOOL YEAR:	85-86	86-87	87-88	88-89	89-90	TOTAL CHANGE
Total New Students	239	689	977	1,140	1,140	1,140
Revenues						
Baseline Condition		\$12.1	\$12.3	\$12.4	\$12.6	\$0.5
With Project Growth		\$2.5	\$3.7	\$4.5	\$4.6	\$4.6
Expenditures						
Baseline Condition		\$11.8	\$12.0	\$12.2	\$12.2	\$0.4
With Project Growth		\$2.8	\$4.1	\$4.8	\$4.8	\$4.8
Capital Expenditures						
Baseline Condition		\$0.2	\$0.2	\$0.2	\$0.2	\$0.8
With Project Growth		\$3.2	\$3.2	\$0	\$0	\$6.4

^aTotal change in revenues and expenditures are associated with 1,140 new students. Capital requirements are based on new seats for 849 students [1,140 students minus current available seats (139), minus future available seats due to declining baseline enrollments (152) $1,140 - 139 - 152 = 849$].

Indian River

Indian River School district will experience nearly 50 percent growth from 1985 to 1990 but is not expected to have serious operating shortfalls. Although the seat capacity appears to be sufficient through 1987, the actual requirements for

new construction will depend heavily on the distribution of on-post children. The current analysis, which assumes that the on-post students will be distributed 25 percent to Indian River and 75 percent to Carthage, projects a requirement of 350 seats at a cost of \$2.8 million. Indian River's peak operating shortfall occurs in FY87 and is \$91,000, nearly 1 percent of the total budget. This shortfall is of sufficient magnitude to cause the school to increase at least one source of revenue or modify operations (see Table 5-4).

TABLE 5-4. INDIAN RIVER BASELINE CONDITIONS AND NEW PROJECT-RELATED GROWTH^a

(\$'s are Expressed in Millions of Constant 1985 Dollars)

SCHOOL YEAR:	85-86	86-87	87-88	88-89	89-90	TOTAL CHANGE
Total New Students	176	508	720	840	840	840
Revenues						
Baseline Condition		\$6.9	\$7.0	\$7.1	\$7.2	\$0.3
With Project Growth		\$1.7	\$2.6	\$3.2	\$3.3	\$3.3
Expenditures						
Baseline Condition		\$6.8	\$6.9	\$7.1	\$7.1	\$0.3
With Project Growth		\$1.9	\$2.7	\$3.2	\$3.2	\$3.2
Capital Expenditures						
Baseline Condition		\$0.2	\$0.2	\$0.2	\$0.2	\$0.8
With Project Growth		\$0	\$1.4	\$1.4	\$0	\$2.8

^aTotal changes in revenues and expenditures are associated with 840 new students. Capital requirements are based on new seats for 350 students [840 students minus current available seats (412) minus future available seats due to declining baseline enrollments (78) $840 - 412 - 78 = 350$].

Thousand Islands

In 1987, 1988, and 1989, the Thousand Islands School District is expected to have significant operating deficits accompanied by small capital requirements. Seat capacity for the junior/senior high school students is sufficient, and the

projected elementary school shortage is slight. The FY87 operating shortfall is \$150,000, 2.7 percent of the total budget. The operating shortfall will require the district to increase revenues and/or modify operations (see Table 5-5).

TABLE 5-5. THOUSAND ISLAND BASELINE CONDITIONS AND NEW PROJECT-RELATED GROWTH^a

(\$'s are Expressed in Millions of Constant 1985 Dollars)

SCHOOL YEAR:	85-86	86-87	87-88	88-89	89-90	TOTAL CHANGE
Total New Students	56	161	228	266	266	266
Revenues						
Baseline Condition		\$5.0	\$5.1	\$5.2	\$5.3	\$0.3
With Project Growth		\$0.5	\$0.9	\$1.1	\$1.6	\$1.6
Expenditures						
Baseline Condition		\$5.0	\$5.1	\$5.1	\$5.2	\$0.2
With Project Growth		\$0.7	\$1.0	\$1.2	\$1.2	\$1.2
Capital Expenditures						
Baseline Condition		\$0.15	\$0.15	\$0.15	\$0.15	\$0.6
With Project Growth		\$0	\$0	\$0	\$0	\$0

^aTotal change in revenues and expenditures are associated with 266 new students.

General Brown

The General Brown School District will initially experience modest deficits primarily from the lag in receiving property taxes. Seat capacity is not expected to require new classroom space. The General Brown projected operating deficit is largest in FY87 at \$24,000, or 0.4 percent of the total budget. This operating shortfall should not be a problem and is well within the district's fiscal capabilities (see Table 5-6).

TABLE 5-6. GENERAL BROWN BASELINE CONDITIONS AND NEW PROJECT-RELATED GROWTH^a

(\$'s are Expressed in Millions of Constant 1985 Dollars)

SCHOOL YEAR:	85-86	86-87	87-88	88-89	89-90	TOTAL CHANGE
Total New Students	50	144	205	239	239	239
Revenues						
Baseline Condition		\$5.8	\$5.9	\$5.9	\$6.0	\$0.2
With Project Growth		\$0.5	\$0.7	\$0.9	\$0.9	\$0.9
Expenditures						
Baseline Condition		\$5.7	\$5.8	\$5.9	\$6.0	\$0.3
With Project Growth		\$0.5	\$0.7	\$0.9	\$0.9	\$0.9
Capital Expenditures						
Baseline Condition		\$0.15	\$0.15	\$0.15	\$0.15	\$0.6
With Project Growth		\$0	\$0	\$0	\$0	\$0

^aTotal change in revenues and expenditures are associated with 239 new students.

Copenhagen

The Copenhagen School District shows a projected positive cash flow from operation and sufficient capacity for the new students. Although initial indications are that no problems are expected, Copenhagen is a small district and slight budget deviations could create financial hardships. State aid, which accounts for up to 75 percent of Copenhagen's revenues, is assumed to be sufficiently compensated by growth aid to make up for the lagged revenues from new district residents. The district population is less than 3,000, making for less flexibility in managing even modest deficits. Consequently, the school district will need to monitor project-related impacts closely for the warning signs of potential problems (see Table 5-7).

TABLE 5-7. COPENHAGEN BASELINE CONDITIONS AND NEW PROJECT-RELATED GROWTH^a

(\$'s are Expressed in Millions of Constant 1985 Dollars)

SCHOOL YEAR:	85-86	86-87	87-88	88-89	89-90	TOTAL CHANGE
Total New Students	25	73	104	121	121	121
Revenues						
Baseline Condition		\$2.6	\$2.7	\$2.7	\$2.8	\$0.2
With Project Growth		\$0.2	\$0.5	\$0.6	\$0.6	\$0.6
Expenditures						
Baseline Condition		\$2.6	\$2.6	\$2.7	\$2.7	\$0.1
With Project Growth		\$0.3	\$0.5	\$0.6	\$0.6	\$0.1
Capital Expenditures						
Baseline Condition		\$.05	\$.05	\$.05	\$.05	\$0.2
With Project Growth		\$0	\$0	\$0	\$0	\$0

^aTotal change in revenues and expenditures are associated with 121 new students.

SUMMARY

The operating budgets of all six analyzed school districts will be affected significantly by the Fort Drum expansion. All school districts will need to increase revenues from traditional sources even in the baseline case, and this problem will be amplified by the expansion. The school districts will have to manage their operating budgets closely during the first few years of the project. Some school districts will also experience significant capital requirements. These school districts will require assistance to meet capital requirements if severe fiscal stress is to be averted (see Table 5-8). New York State's historical contribution rate of 80 percent for new school construction may not be sufficient. Additional capital assistance for impacted school districts may be necessary.

TABLE 5-8. SUMMARY OF SIX SCHOOL DISTRICTS

(\$'s are Expressed in Millions of Constant 1985 Dollars)

SCHOOL YEAR:	85-86	86-87	87-88	88-89	89-90	TOTAL CHANGE^a
Total New Students	753	2,173	3,082	3,595	3,595	3,595
Revenues						
Baseline		\$49.3	\$50.0	\$51.0	\$51.4	
Project Growth		\$7.0	\$11.0	\$13.3	\$14.2	\$14.2
Expenditures						
Baseline		\$48.5	\$49.3	\$50.1	\$50.2	
Project Growth		\$8.6	\$12.4	\$14.5	\$14.5	\$14.5
Capital Expenditures						
Baseline		\$0.95	\$0.95	\$0.95	\$0.95	\$3.8
Project Growth		\$3.7	\$4.6	\$1.4	\$0	\$9.7

^aThe remaining 1,440 immigrating students are projected to reside in the other 14 impact area school districts. None of these 14 districts is expected to experience significant impacts which would require a detailed analysis.

6. PRELIMINARY FISCAL IMPACTS ON NEW YORK STATE

Historically, the State of New York plays an important role in local public finance. It provides many of the educational, health, and social services to the tri-county area. It also provides support for other programs such as highway maintenance and construction and partial funding for new schools. The state, like other jurisdictions, will experience large revenue and expenditure flows from the growth generated by the expansion of Fort Drum.

Because of the demographics of the immigrants, not all portions of the state budget will be affected by the new growth. The incoming military population is demographically different from the existing population in the tri-county area. It tends to be younger, have more children, and be completely employed. Similarly, the immigrating civilian workers are also different from the existing population, primarily in that almost all will be employed. These differences mean that, in many categories of expenditures, the immigrants will not require the same level of budget resources as the existing population. Military families, for example, receive most health and social services from the Army that are normally provided by the state to civilians. Other programs such as unemployment and economic assistance will be marginally affected since most of the immigrants will be employed. Senior citizen programs are expected to be marginally affected because few immigrants are expected to be senior citizens. Each program must be analyzed and the anticipated growth effects must be assessed before quantifying the fiscal flows that the state can expect.

Coordination with the New York State Comptroller's Office was the first step in the analysis of state programs. That office assisted in determining which programs would be affected by the expected immigrants and provided invaluable

assistance in interpreting historical data, identifying trends, and making adjustments to forecasts to account for data abnormalities. Anticipated changes in fiscal policies, such as tax law changes, were factored in by analyzing the expected changes with comptroller personnel. Assistance from the comptroller's office increased the validity of the analysis and made it possible to take into account known changes.

The expected impact of the growth generated by the Fort Drum expansion can be grouped into four general categories: population increases, job increases, state revenue increases, and expenditure increases. The area and magnitude of growth impacts experienced by the state are slightly larger than those experienced by the tri-county area because of the increased diversity of the state economy compared to the economy of the tri-county area. Conceptually, the increase can be explained by the greater number of goods produced at the state level that will be required by the generated growth and by the inclusion of salaries from individuals who will commute to the tri-county area to work (primarily construction workers). The result is an increase in the number of jobs generated and a corresponding increase in the indirect effects.

Table 6-1 is a summary of the projected annual project-related growth for New York State. Population is projected to increase by a total of 24,360 by 1990. The state's population increase is somewhat less than that expected for the impact area because of anticipated intrastate population shifts. A number of the people new to the tri-county area will be previous residents of other parts of New York State and will not constitute new state residents. The increased population will bring with it more than 7,500 direct and 6,000 indirect civilian jobs, and the new jobs will generate an annual flow of \$483 million in salaries by 1990. New York State is expected to experience annual growth in revenues totaling \$16.4 million by 1990. The increased revenues will be partially offset by an increase in annual expenditures

TABLE 6-1. NEW YORK NEW PROJECT-RELATED GROWTH

(\$'s are Expressed in Millions of Constant 1985 Dollars)

	FY85	FY86	FY87	FY88	FY89	FY90	TOTAL CHANGE
Population	194	5,141	14,167	20,906	24,350	24,360	24,360
New Civilian Jobs ^a							
Direct	388	673	1,876	2,674	1,414	502	7,527
Indirect	158	936	1,922	1,930	975	181	6,103
New Salaries							
Direct ^b	\$9.1	\$55.0	\$161.9	\$275.4	\$333.6	\$347.3	\$347.3
Indirect	\$3.5	\$21.4	\$63.1	\$107.4	\$130.1	\$135.4	\$135.4
Revenue	\$0.4	\$3.0	\$8.3	\$13.3	\$16.0	\$16.4	\$16.4
Expenditure	\$0.1	\$3.2	\$9.1	\$13.0	\$15.2	\$15.3	\$15.3
Capital Expenditure	\$0	\$3.7	\$3.2	\$1.0	\$0	\$0	\$7.9

^aProject-related growth is cumulative except for direct new civilian jobs.^bSalaries for new federal civilians, construction workers, as well as new military jobs.

of \$15.3 million. The state is also expected to experience one-time capital requirements of \$7.9 million by 1990. These capital requirements include payments under state entitlement programs, primarily school construction costs and impact-related expenditures normally made by the state. Discretionary capital projects that the state may approve are expected to lower the anticipated positive annual cash flow of \$1.1 million.

7. SUMMARY AND CONCLUSIONS

SUMMARY

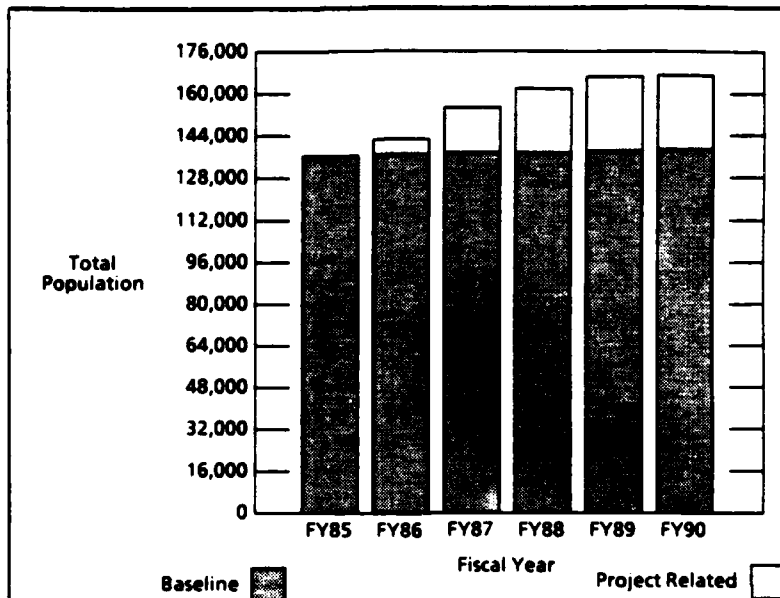
Local Governments

The aggregation of towns, villages, cities, and counties that comprise the impact area will be significantly affected by the rapid growth that will be generated by the expansion of Fort Drum. Although the effects are expected to be significant, they are not expected to be overwhelming. The political jurisdictions that make up the impact area are for the most part well-developed communities with well-established road systems, infrastructures, and public services. In recent years, the population has declined as industry has moved from the area. This population decline has resulted in unused capacity in some infrastructure categories. Thus, the area, as a whole, has the capability to expand its population significantly and realize long-term economic benefits without encountering all of the short-term problems that are often associated with such growth. However, certain local governments may encounter short-term problems in expanding public services. A comparison of the project effects and the baseline condition can best illustrate the relative impact of the Fort Drum expansion.

The population in the impact area is expected to increase by 29,000 by 1990, a 21 percent increase over the forecast 1990 population (Figure 7-1). The Fort Drum expansion (9,400 military jobs and 900 Federal civilian jobs) and associated indirect growth will generate about 6,300 new civilian jobs in the area. The total job impact is expected to bring \$287 million in annual new salaries to the area (Figures 7-2 and 7-3).

FIGURE 7-1. POPULATION COMPARISON

Impact Area Cumulative Changes^a



^aIncludes all towns, villages, cities, and counties in the tri-county area that will be affected by the expansion.

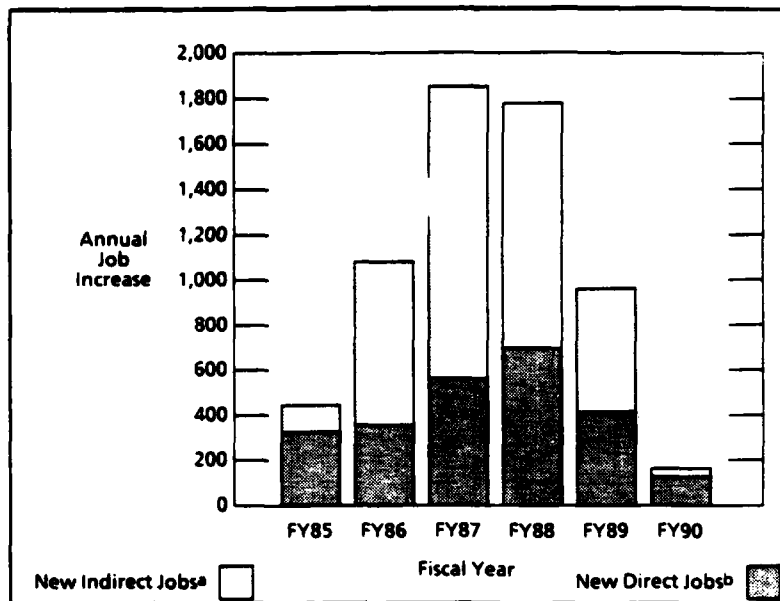
The expansion will bring new revenues of \$25.5 million to local jurisdictions by 1990, which will be accompanied by \$21.4 million in expenditures (Figures 7-4, 7-5, and 7-6).

Significant capital expenditures will be associated with the increased growth; political jurisdictions are expected to expend \$5.3 million in new capital projects (Figure 7-7). Additionally, the Development Authority of the North Country (DANC) is formulating a capital program of tri-county improvements that is anticipated to exceed \$55 million.

The new growth in the tri-county area will generate significant economic activity in the impact area. Along with the substantial public sector activity, the private sector will realize a significant generation of wealth from the increased

FIGURE 7-2. NEW CIVILIAN JOBS

Impact Area Annual Changes



^aIndirect jobs are created by the indirect effects associated with the expansion.

^bDirect civilian jobs include federal civilians and construction workers who are expected to move permanently to the region and be employed on expansion and expansion-related construction.

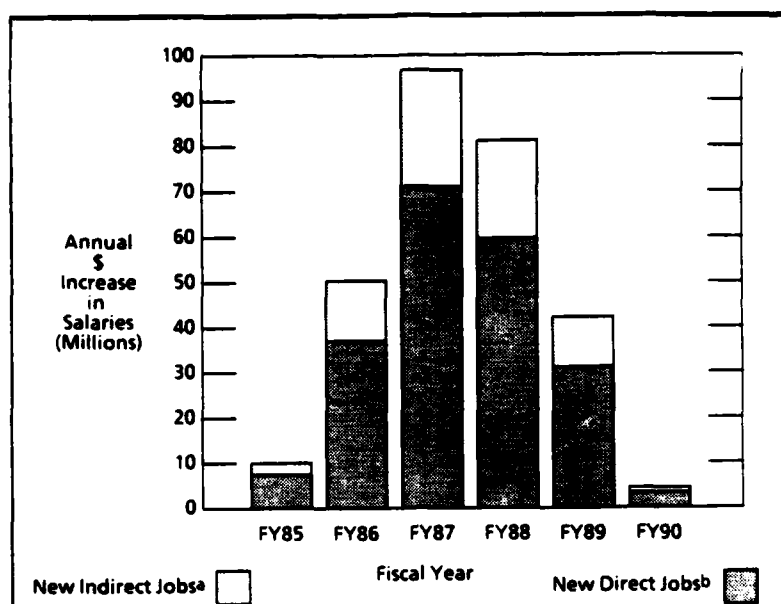
tempo of economic activity; this private sector windfall has not been considered in the analysis of the public sector because of the complexity involved in quantifying it. However, it should be considered at least in qualitative terms. Increases in property values, household earnings, and retail and service industry profits alone will be of the same order of magnitude as the increases in the public sector and will be a significant factor in the tri-county area.

The impact on political jurisdictions follows the same trend in almost every case. All jurisdictions will initially experience a decrease in cash flow. The annual cash flow from the project will be positive by 1989.

Totally apart from the Fort Drum impacts, the cessation of Federal revenue sharing in 1988 will significantly affect the local jurisdictions, and many jurisdictions are already preparing for that eventuality. In some jurisdictions, the lack of Federal Revenue Sharing funds will be more serious than in others, but

FIGURE 7-3. INCREASE IN SALARIES

Impact Area Annual Changes



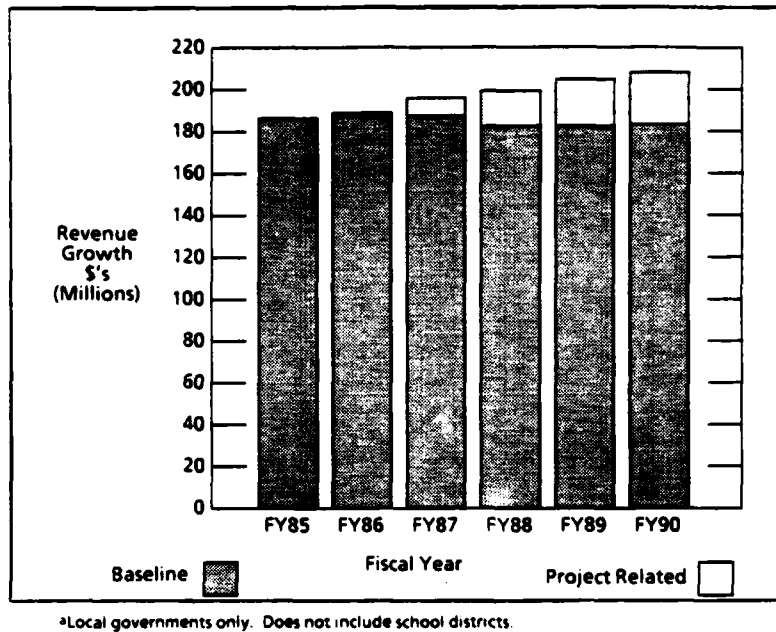
^aIndirect jobs are created by the indirect effects associated with the expansion

^bDirect civilian jobs include federal civilians, construction workers who are expected to move permanently to the region and be employed on expansion and expansion-related construction, and salaries from military jobs.

overall, the impact area jurisdictions appear to be able to cope with the change by altering some of their capital and operating expenditure plans. The major jurisdictions considered in this analysis can meet the anticipated growth requirement if no major expenditures for water, sewer, and solid-waste disposal develop at the jurisdiction level. If the Development Authority of the North Country (DANC) does not provide these services, there would be additional major expenditures required from local jurisdictions. It is also likely that, despite the overall capability of the area to handle the expected growth, some smaller jurisdictions will experience short-term difficulties coping with the new growth. These jurisdictions will have to be identified after more details become known about future Army housing plans, private developments, and the plans of the DANC. The Fort Drum Steering Council (FDSC), with OEA support, will extend the FIA to these jurisdictions after they are

FIGURE 7-4. REVENUE COMPARISON

Tri-County Cumulative Changes^a



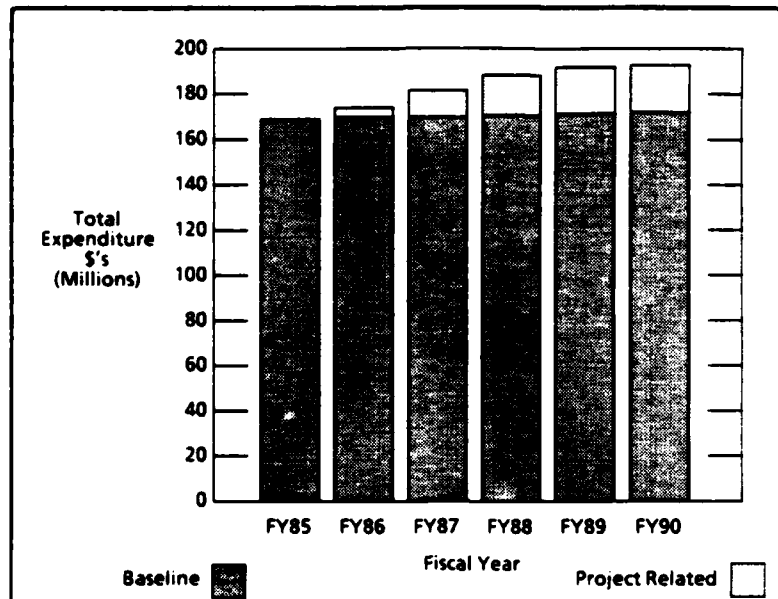
identified and when sufficient information becomes known. This capability along with the monitoring of growth impacts are critical activities that the FDSC must perform.

School Districts

School districts in the impact area are expected to experience significant impacts from the increased population generated by the Fort Drum expansion. The student population in the impact area is expected to increase by about 5,000 by 1990. The school districts will see an increase in annual revenues of \$14.2 million by 1990, accompanied by an increase in annual expenditures expected to reach \$14.5 million. In addition to the operating revenues and expenditures, the increase in the number of students is expected to impose a \$9.7 million capital requirement. Although 80 percent of the capital costs are historically paid for by the State of New

FIGURE 7-5. EXPENDITURE COMPARISON

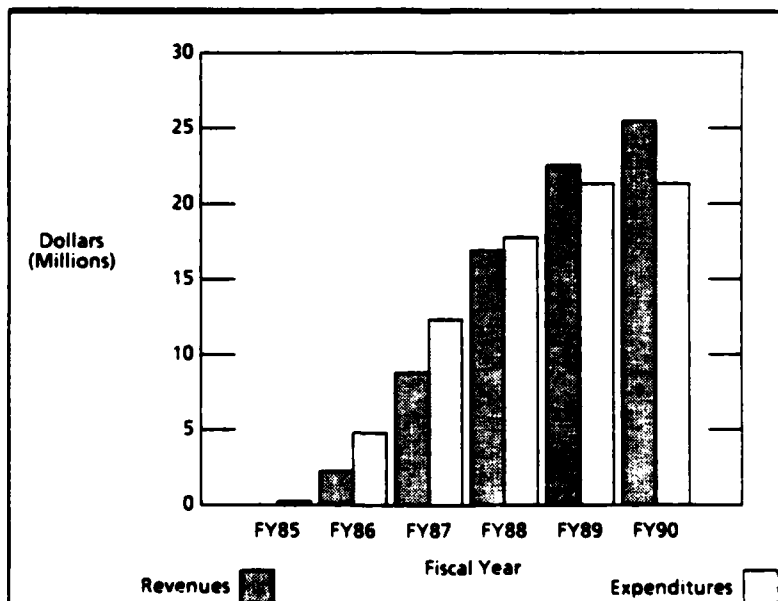
Tri-County Cumulative Changes^a



^aLocal governments only. Does not include school districts.

FIGURE 7-6. REVENUES VS. EXPENDITURES

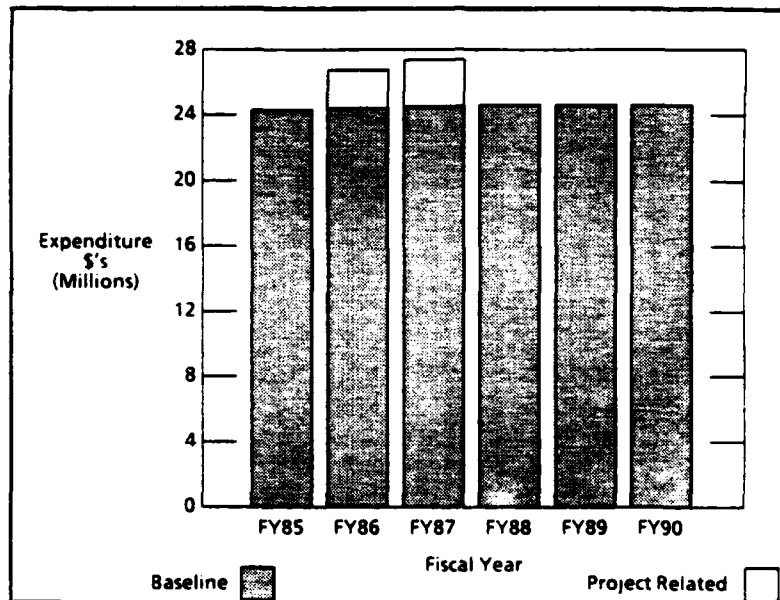
Tri-County Cumulative Changes^a



^aLocal governments only. Does not include school districts.

FIGURE 7-7. CAPITAL EXPENDITURE GROWTH

Impact Area Annual Changes^a



^aLocal governments only. Does not include school districts

York, the local school districts will still have significant capital expenditures. These impacts are not expected to overwhelm the school districts, with the possible exceptions of the Indian River and the Carthage school districts. Those two districts, because of the number of military dependents expected to enroll, may have some unique fiscal problems that will require continual monitoring. The other school districts appear to be able to handle the expected increase in students from a fiscal point of view.

The school districts, like the political jurisdictions, will experience some short-term problems as a result of the expansion. The project will create a small negative cash flow for most districts. The recent teacher wage settlements have increased operating expenditures significantly and will require school districts to raise some sources of their revenues. The decision on where to send the military dependents who reside on Fort Drum will have a significant impact on the Carthage

and Indian River school districts. Our analysis assumes that the split will be 75 percent to Carthage and 25 percent to Indian River. Any changes in this assumption will have to be accounted for and can be updated by the FDSC using the FIA computer model. Another factor that should be considered is the likelihood that the number of dependents for the first few years will be less than forecast because of the different demographics exhibited by the Army's COHORT units—units whose members were recruited for that specific unit and who go through initial training as a group—that will initially constitute a significant percentage of the 10th Mountain Division soldiers. COHORT units tend to be younger and have fewer married members than typical Army units. While such differences tend to evaporate after one station rotation of the unit, COHORT units could result in fewer-than-expected children from military members in the first 3 years of the expansion. This factor should be considered when determining what the capital program for schools should be.

The school districts in the impact area are facing a period of rapid growth that will require prudent management if problems with the educational system are to be avoided. It appears that the school districts in the area will be able to cope with the increased student load unless they are forced to undertake major capital projects that are not supported by the state.

New York State

New York State will have a key role in the Fort Drum expansion but will experience few significant impacts. The magnitude of the state programs that will be affected by the expansion dwarfs the expected Fort Drum impacts on those programs. The anticipated cash flow to the state from operating sources will be positive. It is anticipated that a large portion of this operating surplus will be used by the state to assist local governments with capital requirements. Additionally, the

state, by continuing to lend its expertise and providing technical assistance, can be of enormous value to the local jurisdictions during the growth management process.

CONCLUSIONS

Many of the fiscal problems normally associated with rapid growth will not be experienced in the tri-county area. The jurisdictions in the impact area, almost without exceptions, are in good financial condition, have had sound financial management at all levels of government for a number of years, and are well poised to meet the challenges of rapid growth. The population shifts that the tri-county area has been experiencing as a result of the departure of jobs from the region and the movement of population from incorporated areas have left many communities with excess capacity in many infrastructure categories. These factors create a situation that is conducive to absorbing growth and that is seldom found in areas surrounding military bases.

The jurisdictions in the impact area can expect to undergo some short-term fiscal strain that will be the prelude to a period of long-term economic growth. The short-term strain will manifest itself primarily in the form of negative cash flows caused by the project for the first few years (on the present schedule 1986-1989). The cash flows are expected to become positive in 1990 and remain positive into the future. The short-term problems will be accompanied by significant growth in both the public and the private sector. The generation of wealth in the private sector will complement and amplify the growth of the public sector.

The lack of serious fiscal impacts in the tri-county area rests on two key assumptions: first, that the DANC will formulate and execute a capital improvement plan that addresses the water, sewer, and solid waste needs of the region for the period after 1987; and second, that the State of New York will maintain its historical contribution of 80 percent of the new school construction costs. Although the aggregation of towns, villages, cities, counties, and school

districts will be able to handle growth impacts, some smaller jurisdictions in the impact area are likely to suffer adverse fiscal impacts as a result of the expansion. Insufficient information is known at this time about development plans in each small jurisdiction to identify the towns or villages that may need assistance. The identification and analysis of these jurisdictions will need to be completed as more information from the DANC, developers, and the Army becomes known.

The Steering Council will provide the technical assistance and resources to perform follow-up analyses where appropriate. It will also maintain the FIA model and associated data bases and modules, which will provide a consistent source of planning information to local communities. As changes to the expansion become known, the Steering Council will be able to update the FIA model and assist communities in assessing the impact of the changes. The Steering Council's monitoring and updating role is a critical element in the overall management of growth in the region.

The expansion of Fort Drum will result in many changes in the tri-county area. Some of these changes will create short-term problems for local jurisdictions, while others will provide positive benefits. In both cases, it is essential that managers at all levels of government and in the school districts plan to manage growth. Only by such planning can the negative impacts be minimized and the positive benefits amplified. With a well-considered and executed growth management plan, the region surrounding Fort Drum can look forward to a period of economic growth that should generate significant benefits to the area.

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